University of Minnesota

Medical Bulletin

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Dr. Robert O. Fisch: A Lesson of Love from the Holocaust

Summer 1994

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ON THE COVER:

Front and back cover art by University pediatrician Robert O. Fisch, who tells his story of the Holocaust through paintings and prose currently exhibited at the Weisman Art Museum.

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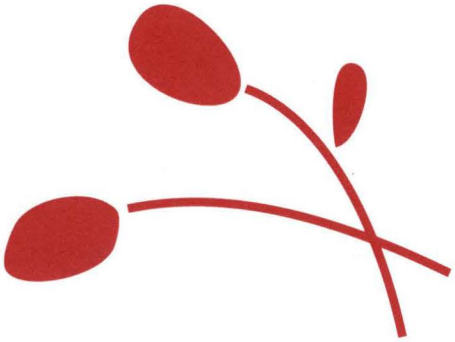

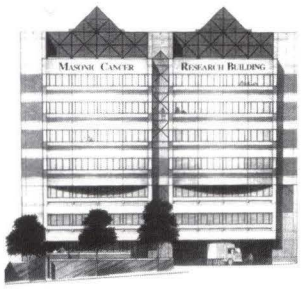

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DEPARTMENTS

"You can't stop the growing,"

says Dr. Robert Fisch, talking about his young patients.

The words could easily describe his own life — his philosophy of hope that touches many through his medical practice and his art, and that sustained him through the indescribable horror of the Holocaust.

They call him a survivor, and he is. He has not merely survived, however. He has found a way to make a mark in the world.

Fisch, a pediatrician at the University of Minnesota for more than 30 years, loves to work with children. "You see the growth and development taking place," he says. "It is like spring. I go into a room where there is a child and it's a joyful experience. It makes me feel very good."

Robert Fisch treats PKU children. Without a special diet and continuous care these children would be mentally and physically retarded. His work is directed solely

These Words are their Flowers

by Jean Murray

Pediatrics professor Robert Fisch teaches a lesson of love from the Holocaust in Light from the Yellow Star, an exhibit at the University's Weisman Art Museum.

toward giving them the best life possible — to live normally and fully.

"My research is focused on the practical application, on making the lives of the kids better," he says.

Living life fully — making life better — has a deep and special meaning for Fisch. He has experienced death and suffering that can scarcely be described. But even in the midst of the horror he held on to the seeds of hope, and when it was over, he did not harbor hate. He wanted, simply, to celebrate life.

Changed forever

When he was six, Robert Fisch's nurse Anna asked what he wanted to be when he grew up. "I said I wanted to be a doctor," he remembers, laughing that a child's dream actually came true. There would be many obstacles.

In 1944, Robert Fisch was 18 years old. His family lived in Budapest, Hungary.

"Our parents provided my brother and me with every kind of education, and with things they were not fortunate enough to have had in their youth. I had just finished high school and was getting ready for further studies. Because I was a Jew, I was not accepted at the university. Instead I attended evening classes at an art school...

From my infancy, I had a devout Catholic nurse named Anna, who lived with us through the years and became like a second mother to me, providing me with unlimited love and kindness. I attended both Friday service at the synagogue and Sunday Mass. I was taught to respect others' beliefs and ways of life, and our door was always open to those who were less fortunate...

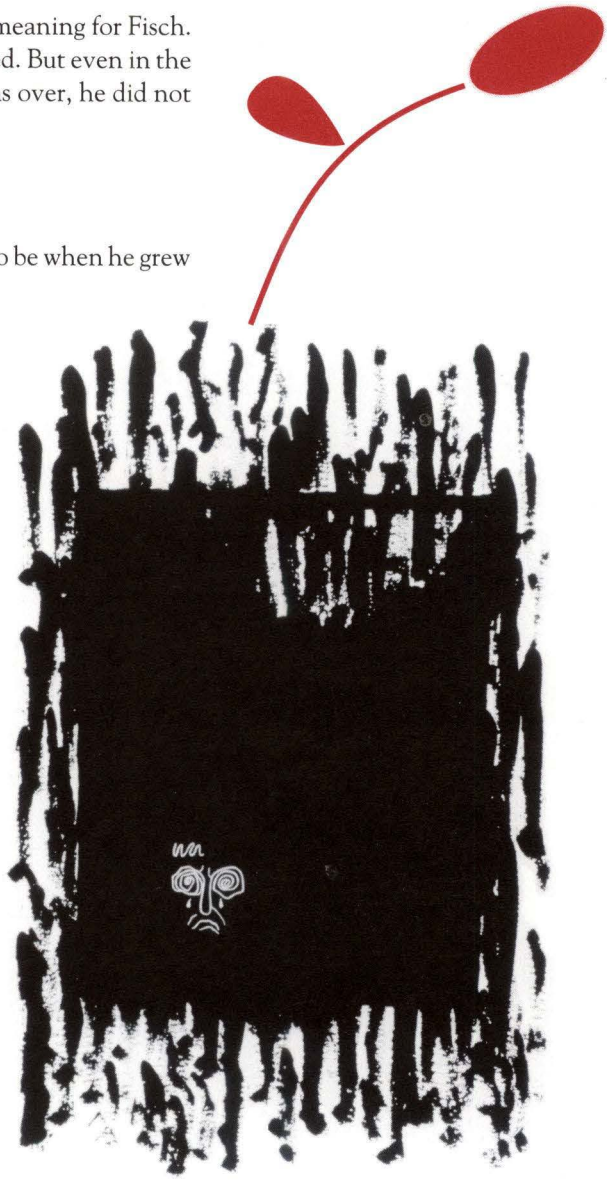
"On March 19, 1944, when the Germans occupied Hungary, my life and the lives of many others were changed forever. Soon after the occupation, all Jews had to be identified on their clothing with a large yellow Star of David. Their property was taken away, and they were moved to the ghettos...

"One day, a very excited man came... He described the first loading of Jews into boxcars: they were jammed shoulder to shoulder, squeezed together, without food or water, with only the clothes on their backs. The doors were locked from the outside, and the trains were heading toward an unknown destination... When the bombs started dropping on Budapest, I knew that survival would require sacrifice."

Fisch was taken to a work camp with 280 men ages 18 to 48. They were assigned the most dangerous work, such as digging out unexploded bombs. All personal possessions were confiscated, and photographs of family members destroyed.

In early 1945, while working near the Austrian border, an epidemic of typhus broke out among the prisoners. One day, two trucks came to pick up the sickest.

"The driver said, 'Come on, there's room for 30 in the hospital where I'm taking these people.' 'Fisch,' the doctor said, 'you're the sickest; come.' But I did not go. I did not trust them. The doctor told me I was crazy not to go and said that he never wanted to see me or hear my complaints again. Many who were well volunteered to go to the



"I cried out against the brutality, **but no one listened."**

"Behold my misery *and save me."*

hospital, but only one 'lucky' one was chosen to be number 30. All were shot at the edge of the village...

"In the dead of winter, we marched from dawn to sunset at the foot of the Alps. Sometimes we marched for days without food or water. If someone sat down, he was shot. We carried nothing. Blankets were acquired by picking one up off the ground where it lay after someone had dropped it from fatigue and no longer needed it. As we climbed toward the mountain pass, the number of bodies increased. We were ordered to stop and form lines of five. At the pass, two were randomly shot from each line. As some fell, the rest kept marching...

"We reached a small village by late afternoon. We numbered thousands, hungry and exhausted. An Austrian peasant brought a bag of apples to the edge of the fence and started to throw them toward us. The reaction of the prisoners was wild. But the peasant paid a dear price; she was shot on sight."

More marches to other concentration camps followed. Death came to many through shooting, starvation, or suffocation in crowded quarters.

"May 4, 1945, the Americans arrived! The young men from overseas risked their lives and saved ours... The vanguard American troops — who had fought the Germans all the way from Normandy until they met the Russians in the East — even they were puzzled by our situation. They couldn't believe their eyes or our stories. Who could? Who could believe that we suffered our 'Calvary' only because we had a different religion?"

Out of 280 men, only 120 were still alive.

Fisch later learned that his father had died in a camp from starvation. A man who had been there said he always gave his food away to the needier ones.

"He was so greatly respected in the camp that he was the only one not buried in a common grave. After the war, an eyewitness told me all this and led us to his grave. We brought him back, and he was the first to be buried in the Jewish Memorial Cemetery for the Martyrs in Budapest."

His mother survived, having been given refuge at the home of his nurse, Anna.

"Out of 600,000 Hungarian Jews, only 80,000 had survived...

"I feel that all of us who were marked by the yellow star were tatooed inside. We have a special obligation, not a privilege, in being alive. As survivors, our moral and human obligations are essential, and our standards have to be based on human principles rather than on practicalities. We must take a stand against suppression and injustice."

An optimistic experience

After the war, Robert Fisch returned to Hungary and finished medical school. In 1957, he came to the United States and in 1958 began a residency in pediatrics at the University of Minnesota Medical School. He has been at the University ever since.

"Working with children is an optimistic experience," he says.

After completing his residency, Fisch was asked if he would be interested in working with PKU children, and he agreed. It has been the focus of his medical career.

PKU is an abbreviation for phenylketonuria, a metabolic inherited disease. The

child has a single enzyme deficiency, and is unable to break down the protein phenylalanine. When unmanaged, the otherwise normal infants eventually deteriorate into severe motor and mental retardation. In past years, without treatment more than half of PKU babies were unable to talk, and a third never able to walk.

PKU was discovered in the 1930s, but it wasn't until 1961 that a screening test was developed for infants. In Minnesota, testing for all babies began in 1966. The simple, inexpensive blood test is done before newborns leave the hospital.

PKU babies are put on a strict diet low in phenylalanine, similar to a vegetarian diet. With diet promptly initiated, life can be near normal. Parents keep close tabs on everything the child eats, and on motor development.

Dr. Robert Fisch, director of the University's PKU Clinic, confers with pediatric dietician Dorothy Markowitz and patient Jennifer Miller and her mother.

The PKU clinic at the University is a resource center, providing genetic counseling and educational information to PKU families, and acting as a liaison between educational, social, and health facilities. Research is also conducted aimed at continued improvement in treatment of PKU.

Over the last 30 years, the University of Minnesota PKU clinic has become one of the best-known in the United States, often collaborating with other clinics around the country. Robert Fisch is director of the clinic. He and his colleagues currently work with more than 150 area families, always trying to find better ways to improve the day-to-day lives of the children and their family members.

"We do a little better each day," says Fisch. "It is a constant change taking place. What we do today will be outdated tomorrow; what we do today is far better than yesterday. There is no cure, only treatment through diet. But the outcome is extremely good with early treatment. Within a decade, there may be a way for treatment with enzyme replacement."

"I heard the news;

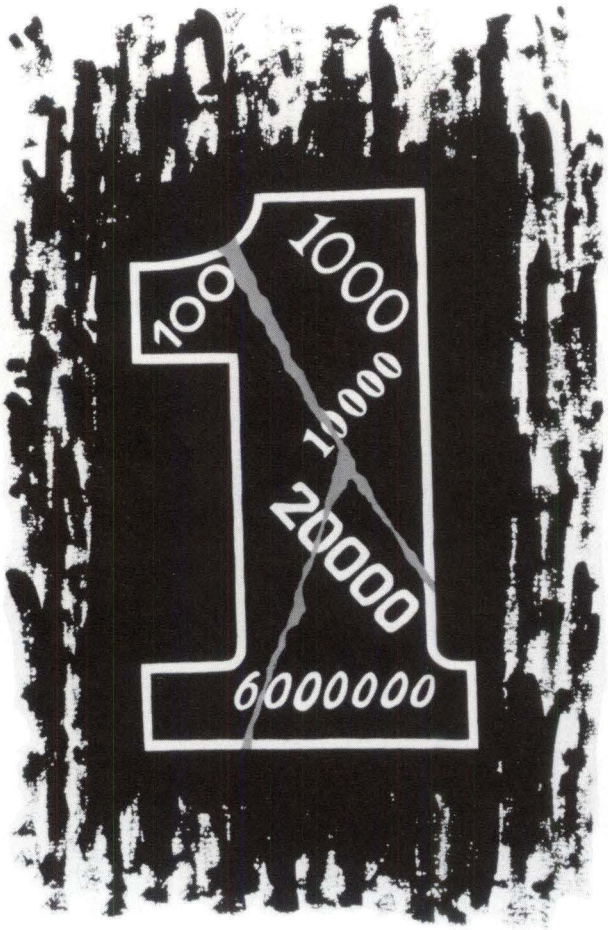
I trembled and became

speechless."

As PKU children grow, they take over much of the responsibility for monitoring their diet. If they follow the diet, they will live normal lives with full life expectancy.

Robert Fisch finds the work very rewarding, especially the closeness he has developed with the PKU children and their families. "The families are so special," he says. "Not many people have PKU (about 1 in 12,000 newborns), but for those that do, the research and treatment is very important."

"Because of them *our eyes are full."*



A second career

Dr. Fisch's art career began in Budapest before the war, and continued when he came to the United States. He has studied art at the Walker Art Center in Minneapolis, the University of Minnesota, and the Minneapolis College of Art and Design.

Despite the demands of medicine, Fisch manages to blend the two careers. "Much of the painting process is intellectual," he says. "When you're not painting you can practice painting in your head."

He continues: "In spite of the limited perception of our senses, the human mind appears to have unlimited ability, reinforced with imagination, to discover, to create, and to enrich the quality of life. Imagination can overcome anything. With unlimited imagination, people have been able to invent that which extends the limits of the horizon for human perception and goes beyond the recognizable, to gather, analyze, comprehend, and create. These human abilities are equally applicable to the fields of art and medicine."

Fisch has made his mark in both medicine and art, but he doesn't consider his efforts to be particularly significant. "Any person who has the willingness and some potential can do well in any area," he says, "whether it is medicine, art, or whatever you choose."

He also feels it's important to try. "Each of us should have an area in which we feel a little bit special, in which we can excel. It doesn't matter what it is."

For Fisch, art is a useful complement to medicine. "Art gives me appreciation for beauty, color, and even life itself. In medicine we face sorrow, tragedy, and sometimes joy. We provide strength and hope, and we offer the opportunity for scientific progress. It is a constant fight in which battles with diseases are won and the horizon expands further over conquered ground, yet as we face imminent death, the ultimate war is lost. There is no final victory in medicine. We doctors only transform one problem into another and extend existence.

"Art, however, is full of beauty; unlike medicine, there is no deterioration of the 'product.' If the artist communicates beyond a certain level, the art becomes immortal. Art survives over time, while the body fades away. Art is one result of the fear of death: we want our art to be an immortal monument beyond the mortal body, like the drawings by ancient people on cave walls. We want to leave behind a reminder that 'I was here!' Art is an expression of joy for being alive; it is victory over mortality.

Art has given me another dimension or sensation that I do not get in medicine; the lonely experience of creation. Medicine requires the company of both doctor and patient in a cooperative, one-to-one partnership. In different ways, both art and medicine can provide an opportunity for creativity. For the artist, facing the empty canvas or paper is as exciting as it is for the doctor to begin examining a new patient. In both situations, insight, intelligence, experience, and intuitiveness are needed in order to come up with a solution, a creation. But the artist, unlike the doctor, does not need another person as a partner in that creation.

"Living is an art, and medicine is an art form to make life a little better and a little longer. Art and medicine are two consequences of the same desire to sustain life."

Completing the circle

It is only recently that Fisch has used his art and prose to try to describe the experience of the Holocaust. For many years — nearly half a century — it was too painful. And this time, he was not painting alone.

He speaks softly as he says, "The art came from deep inside me. It was not me who did these paintings — it speaks for many who were there. It was like a seed inside me, like a plant needing to grow. The book, the art, is like a circle, a completion for me of what was."

To begin his book, Fisch writes: "I have been thinking for quite a long time whether any medium is appropriate to describe the scope of the tragedy of the Holocaust. How can sorrow, suffering, and atrocities of this magnitude be expressed? With this book I want to say that it is not the ugliness of hate but the beauty of love which survives in time. History is the result of human emotion, conflict, and interest. The purpose of this book is not to make a memento of this horror but to know it and to learn from it. We need to find out how to prevent the occurrence of such a tragedy again and how to be human beings in all circumstances. We must develop principles of belief which provide a good quality of life, with self-respect as well as respect for others and by others. The Holocaust teaches this lesson: 'Love overcomes hate.' "

Natasha Frost, Minnesota Daily

The "Light from the Yellow Star, A Lesson of Love from the Holocaust" exhibit is currently at the Weisman Art Museum at the University of Minnesota.

And at the end he says: "As beautiful pearls are produced by the suffering of an oyster, so the Holocaust created beautiful heroes — not only among the victims and survivors but also among the others who risked their own lives in order to help those who were persecuted and to save their lives — people like my old nurse, Anna, and her family. Even among the most sorrowful memories, the humanitarian acts performed by compassionate individuals shine above the dark side of brutality. I wrote this book because good can be learned even from one of the worst human tragedies. In life — and even in death — the human spirit, love, and fine principles lead the way for the survivors.

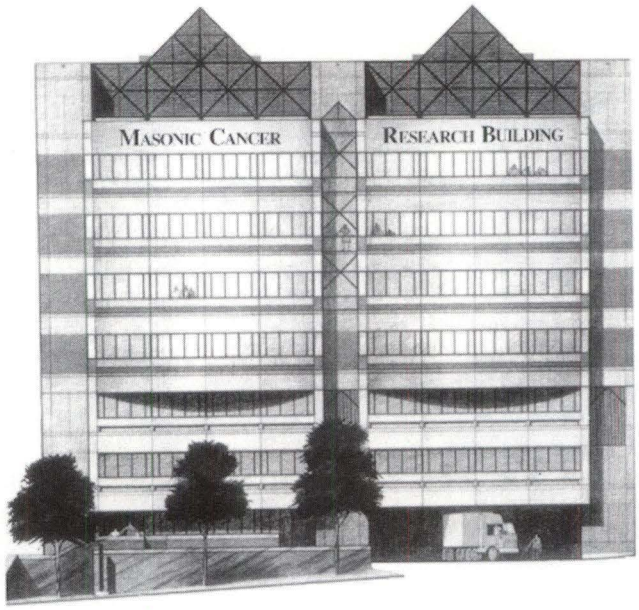
"When we reach the end of our days and make an inventory of our actions, we should conclude: 'I did the right thing — for myself and for others. My time was spent well and my life has been valuable and worthwhile.' We have to make a choice either to become a suppressor, taking advantage of the misery of others, or to remain humane even in an inhumane environment.

"The light from the yellow star should always remain with us." ■

Editor's note: *We wish to thank the Frederick R. Weisman Art Museum at the University of Minnesota for permission to reproduce art and prose from the "Light from the Yellow Star" exhibit. The exhibit continues at the Weisman Museum through June 17. All proceeds from the sale of the book, Light from the Yellow Star, A Lesson of Love from the Holocaust, will go to the Light from the Yellow Star Foundation to develop a study program about the Holocaust for school children. The book is available at the Weisman Museum, (612) 625-9495.*

We would also like to thank Meredith McNab at Minnesota Medicine for her help and for permission to quote from Robert Fisch's essay, "Sustaining Life through Art and Medicine," published in the November 1990 issue.

The quotations which accompany the artwork are translations from the gravestones at the cemetery where Robert Fisch's father is buried.



The University of Minnesota Cancer Center: Bringing it all Together

The new Masonic Cancer Research Building will enable researchers from many Medical School departments to collaborate their efforts and advance cancer research at the University.

by Jean Murray and Jodi Ohlsen Read

Thirty million dollars. An end and a beginning.

On January 4, 1994, University President Nils Hasselmo announced the completion of the Cancer Center capital campaign that raised more than $30.5 million in support of cancer research at the University of Minnesota.

And on March 26, the cornerstone was laid at the site of the Masonic Cancer Research Building, with construction soon to follow.

The four-year campaign brought together leaders from the University and the community, faculty and non-faculty physicians, business people and private citizens in a common cause — a consolidated effort to combat cancer.

Survival rates for cancer patients have risen dramatically in the past half-century, but there is still a long way to go. Many mysteries and unanswered questions remain; too many people still do not survive cancer.

The key to unlocking those mysteries is research, and the University of Minnesota has a tradition of excellence as one of the nation's leading cancer research institutions. Currently, more than 100 Medical School faculty and 50 faculty from other collegiate units are conducting vital clinical and basic cancer research in key areas such as medical oncology, therapeutic radiology and radiation oncology, gynecologic oncology, pediatric oncology, cancer immunology, cancer chemo-prevention, and genetics, epidemiology and cancer prevention.

The need for a cancer center

Investigations by these talented researchers, however, have been limited by factors beyond their control. No new laboratory space has been available at the University of Minnesota for cancer research in nearly 30 years. Inves-

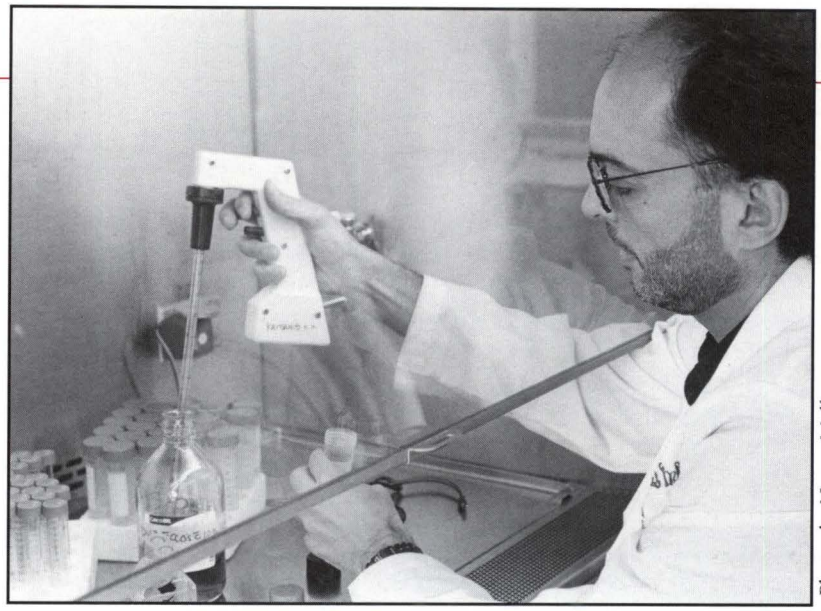
tigators are isolated from their colleagues in laboratories spread throughout the health sciences complex — laboratories which lack the space and up-to-date equipment needed to effectively progress with highly complex investigations. This lack of state-of-the-art research facilities also has hindered the University's efforts to recruit cancer researchers from outside the University.

"Cancer research is a complex business," says acting director of the Cancer Center, Dr. John Kersey. "It requires experts in a whole variety of fields gathered together in one place with the goal of conducting real quality research. Cancer is not easy to understand or easy to treat. There are lots of unanswered questions."

In order to ensure future excellence in cancer research at the University of Minnesota, the Medical School — in cooperation with the Colleges of Biological Sciences, Pharmacy, and Veterinary Medicine; the Schools of Dentistry, Nursing, and Public Health; and the University Hospital and Clinic — proposed the creation of a comprehensive cancer research center.

And now the dream will take shape. Construction of state-of-the-art laboratories is underway. The Masonic Cancer Research Building will bring together investigators from all schools and departments to collaborate on projects and share ideas and knowledge. The University of Minnesota Cancer Center will provide necessary laboratory space and equipment and will facilitate coordination of research funds.

By enabling closer interaction among cancer researchers and clinicians, the Cancer Center will improve diagnosis and treatment of pa-



Photos by Nancy Mellgren

Emmanuel Katsanis, M.D., adds media to the neuroblastoma tumor cells growing in culture.

Dr. Emmanuel Katsanis

By the time most children with neuroblastoma are diagnosed, the cancer cells are already widely spread. Despite treatment, more than 80 percent of children with advanced neuroblastoma will die. Emmanuel Katsanis, M.D., assistant professor in pediatrics, is looking for ways to improve diagnosis and treatment of this cancer.

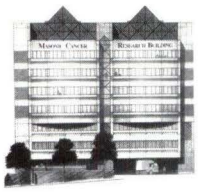
Neuroblastoma, the most common malignant tumor of infancy and early childhood, affects the sympathetic nervous system. Katsanis is exploring a new type of treatment that focuses on the immune system and its ability to recognize and kill neuroblastoma tumors.

He is excited about the opportunities the new Cancer Center will offer. "Working in the Cancer Center will have many advantages," says Katsanis. "Our research would benefit from the closer interaction of scientists that the Cancer Center would encourage. And, with additional funding, expanded lab facilities and better access to equipment would also help.

"Currently, we are looking at how we can enhance the immune system's capacity to fight this tumor," says Katsanis. Using genetically engineered tumor cells may be a way to stimulate the immune system to better recognize and destroy cancer cells. "One way to do that is to introduce different genes into the tumor. We have the ability to put genes directly into the tumor cell," he explains. "The cell then makes the proteins that can stimulate the immune system.

"We also have the capability of inserting genes that are normally expressed on the surface of cells, called MHC or B7 genes. If they are put on the surface of the cells, the immune system can better recognize the tumor and fight it. We have found that vaccinating tumor bearing mice with genetically modified neuroblastoma cells may help increase the host's immunity and may get rid of cancer cells left behind by radiation, chemotherapy, or surgery."

These treatments, along with current therapeutic treatments, may be able to improve the survival rate of children with advanced neuroblastoma. ■



Dr. Denis R. Clohisy

As an orthopaedic surgeon and a researcher, Denis Clohisy, M.D., assistant professor in the Department of Orthopaedic Surgery, sees many potential benefits of the new Cancer Center. "For clinical work, the Cancer Center will provide an important organizational structure that is essential to providing the best care possible," says Clohisy. "The Cancer Center will also increase interaction between scientists and bring investigators with similar interests together."

Clohisy is currently studying how tumors, specifically breast cancer cells, destroy bone. He has developed several models designed to study this problem. "This is important," he explains, "because up to 85 percent of women who die from breast cancer have tumor that has spread to their skeleton. This condition, called tumor osteolysis, can cause pain, immobility, and skeletal fracture.

Denis Clohisy, M.D., Department of Orthopaedic Surgery, prepares for surgery.

"We have identified at least one growth factor made by tumor cells which recruits cells from the body to the site of bone tumors. These cells are recruited and then destroy the bone," he says. Clohisy's work on growth factors could also be useful to other areas of research, such as leukemia research. In situations like this, the Cancer Center will play a valuable role by encouraging communication among researchers.

"For example," says Clohisy, "if we identify a growth factor involved in tumor osteolysis, the Cancer Center network will help me determine if there is anyone else studying that particular growth factor, even if for different reasons. If so, they may have a model or other unique scientific tools that I can also use — tools that take years to develop."

Gathering clinical physicians and researchers to work within one network is a logical way to approach a complex field like cancer research, believes Clohisy. "The work I do with breast cancer and tumor osteolysis is a good example of how a clinical problem, a common problem, can be studied through both clinical and laboratory investigations. As work in the lab begins to solve the problem, treatment and early detection can then be enhanced, with the ultimate goal being no need for surgery." ■

tients. It will increase visibility and public awareness of the outstanding cancer research programs underway at the University of Minnesota, and it will serve as a vital resource to scientists, care providers, and the public.

Building for the future

The four-story, 81,000 gross square foot facility will serve as a focal point of cancer research at the University of Minnesota. Located on the East River Road on the Minneapolis campus, the building will contain 30 state-of-the-art laboratories, plus seminar facilities and office areas.

Recruitment of renowned cancer specialists to enhance the already outstanding faculty is a vital part of the Cancer Center effort. To date, seven new endowed chairs have been pledged or established. Additional chairs are planned, to further research in other cancer areas and to attract top researchers to the University of Minnesota. As a result of the Cancer Center campaign:

- The Children's Cancer Research Fund has pledged $3 million to establish two Children's Cancer Research Fund Endowed Chairs for research focused on the causes, diagnosis, treatment, prevention, and cure of children's cancers;
- A local foundation has contributed $1.5 million in gift support to create an Endowed Chair in Bone Marrow Transplantation Research;
- The Margaret Harvey Schering Trust has established a $1 million Margaret Harvey Schering Land Grant Chair in Cancer Research for high-priority research;
- Marilyn Tickle Bryant, Richard Tickle, and Robert Tickle have created a $1 million Tickle Family Land Grant Chair in

Breast Cancer Research;

- Winston and Maxine Wallin have established the $1 million Winston and Maxine Wallin Land Grant Chair in Cancer Prevention and Genetics;
- More than $500,000 has been pledged toward a $1 million Endowed Chair in Women's Cancer Research, with a specific focus on gynecological cancers.

The center will enable additional research programs in the broad fields of cancer immunology, molecular and cellular biology, pharmacology, biochemistry, dentistry, public health, veterinary medicine, oncology, neurology, otolaryngology, dermatology, nursing, surgery, and orthopaedics.

Support from many fronts

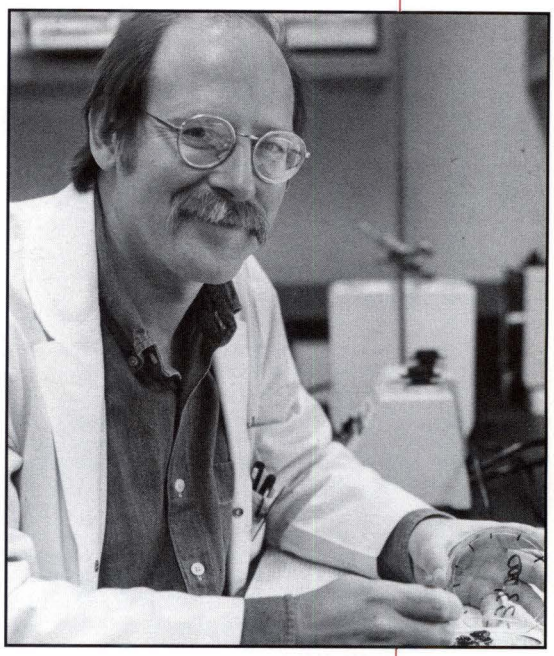
Throughout the Cancer Center campaign, support came from many places — the faculty, the community, business, and from patients and their families who have been touched by cancer. Several special events highlighted the fund drive, touching a wide range of people from celebrities to baseball fans.

Cancer Center Day at the Dome was held September 17, 1991, and was an event dedicated to educating the Twins crowd about cancer research and treatment at the University of Minnesota. Pitcher Steve Bedrosian (whose son has been treated for leukemia at the University) and other Twins players participated in a pre-game ceremony for the Cancer Center. Jamie Jo Huss from South Dakota, a leukemia patient, threw out the first pitch.

Rashad on Ice, a celebrity "freeze" of former Vikings star

Dr. Peter M. Anderson

The body of knowledge is just too large for one person to come close to knowing what he or she should know about a specific area of cancer," says Peter M. Anderson, M.D., Ph.D., Departmemt of Pediatrics. "Generally, Ph.D.'s focus their expertise on a tiny area of science and M.D.'s are expected to be experts on vast areas, like cancer. The Cancer Center can bring those mindsets together. Whether we share equipment or knowledge, I believe we'll all be more productive together."



Peter M. Anderson, M.D., Ph.D., examines the therapeutic effect of a new cancer drug.

As an M.D. and Ph.D., Anderson conducts basic research and sees patients with cancer. In the lab, he is studying interleukin-2, a natural hormone that stimulates the immune system. Although it is readily available, he is searching for a less toxic form. So far, interleukin-2 as an aerosol seems to have less toxicity. A biotechnology company is now conducting trials on the hormone in a liposome drug delivery system at the National Cancer Institute. "Our work with interleukin-2 is a good example of how the University has the critical mass to come up with new and innovative treatments," says Anderson.

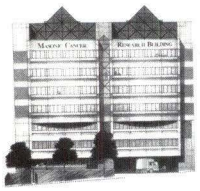
Anderson has also done significant work with glutamine nutrition to cut down the side effects of chemotherapy. "Glutamine has directly benefited some cancer patients by reducing the severity and duration of mouth sores after chemotherapy," he says.

His interest in glutamine arose from an observation of a great need to make chemotherapy less toxic. "Current treatments of chemotherapy-induced mouth sores aren't very effective — it would be much better to simply prevent the mouth sores," says Anderson. "The lining of the mouth may require a simple amino acid, glutamine, to remain healthy. We have taken the amount of glutamine in a normal diet and given it to patients. The patients not only had less severe mouth sores but the duration of the sores was seven days shorter.

"We have tested this treatment in a number of different ways and are developing data for FDA approval. It is a long road to FDA approval but the pilot study is very suggestive," says Anderson.

In the future, Anderson hopes that the University will serve as a center for patients whose cancers are difficult to treat. "We could fill a fairly unique niche in Minnesota by providing new treatments," he says.

For Anderson, the Cancer Center may be a step in that direction. "I enjoy doing research so much that it's hard to imagine being with other cancer scientists as anything but positive. I can only see more productive collaborations and new ideas coming out of the Cancer Center." ■

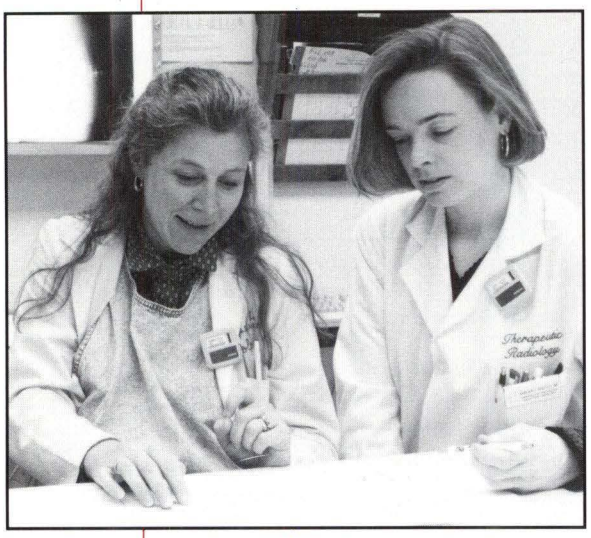


Dr. Kathryn E. Dusenbery

University of Minnesota researchers are continually working to make cancer treatments more effective and to reduce side effects of treatment. Total body irradiation (TBI) is an important preparation for bone marrow transplantation. Unfortunately, lung damage is possible after TBI. To determine the best way to protect the lungs, Kathryn E. Dusenbery, M.D. assistant professor, Department of Radiation Oncology, is conducting a study that compares the effects of TBI on lungs blocked from the radiation and lungs that are not blocked.

"Different institutions give TBI in different ways," explains Dusenbery. "We hope to find out which method is the most effective with the least damage to the lung." During the radiation, lungs are sometimes blocked from radiation to protect them from damage. But, this may not be best for the lungs, according to Dusenbery. "It may be worse for the lungs to be partially blocked from radiation because some of the unblocked areas may get more radiation than they would if not blocked at all."

Since there is no way to measure exactly how much radiation the lung is getting, researchers use computer models to estimate the amount of radiation reaching the lung. "However, we don't know how perfect that model is," says Dusenbery.



DeeDe Van Slyke

Kathryn E. Dusenbery, M.D., left, Department of Radiation Oncology, confers with third-year resident, Margaret Winters, M.D.

"To help us learn about lung exposure to radiation, we use an anthropomorphic phantom — a mannequin-like hunk of plastic that is put together like a human. The body parts, the lung and bone for example, have the same density as the actual human parts," she explains. "We put chips into small holes in the 'body' that read dose to see what amounts of radiation are getting to the lung." Dusenbery hopes to find out which parts of the lung get small doses of radiation and which areas receive higher doses. So far, computer modelling suggests that, to keep the entire lung under a certain dose of radiation, it's probably best not to block the lung at all.

"The lower the dose of exposure, the better for the patient," she says. "Potentially, results from this research may help reduce pneumatitis — inflammation of the lungs — which is one common cause of death after transplantation."

Although most of Dusenbery's work is clinical, she believes that other researchers' work will also be instrumental to her research. "Having the Cancer Center will encourage collaboration and facilitate communication between the areas to reach our common goals faster," she concludes. ■

Ahmad Rashad, was held January 23, 1992. Celebrities in attendance included Scott Studwell, Ed Marinaro, Jerry Burns, Franco Harris, Sinbad, and Bill Murray. Net proceeds from the event, approximately $80,000, were directed toward creating an endowed research position in cancer immunobiology at the new Cancer Center.

Cancer Center steering committee members, led by General Chair Winston Wallin of Medtronic Inc., held awareness events in many parts of Minnesota, addressing civic and community groups on the subject of cancer and the need for a new center. Jim Spicola of Cargill Inc. led the campaign in its early stages, and worked tirelessly until succumbing to cancer in 1991.

Minnesota Governor Arne Carlson lent his support, proclaiming University of Minnesota Cancer Center Days at the kick-off and the conclusion of the campaign.

Former Medical School Dean David M. Brown and Dr. John Kersey, acting Cancer Center director and head of the University's Bone Marrow Transplantation Program, championed the idea of the Cancer Center. Along with many supportive faculty members, they saw the concept through to implementation.

"The Cancer Center will have a major beneficial impact for this state and the region as the focal point for answering and resolving the dilemmas of cancer," says Brown. "Translation of research findings for the public and for the health care professional will enable the scientists to communicate the significance of their laboratory discoveries."

The need continues

Construction has begun on the Masonic Cancer Research Building, but the campaign is far from finished. Continued support of the Cancer Center's mission of prevention, treatment, and cure of cancer is critical. Research into the underlying causes of cancer must be advanced.

There are so many kinds of cancer, so many researchers involved in expensive, painstaking studies, and the breakthroughs are often but small pieces in the overall picture. The new labs that will be built must have state-of-the-art research equipment to facilitate thorough, efficient investigations.

A number of endowed chairs were established during the campaign, and support must be maintained in each of these areas of research — breast cancer, bone marrow transplantation, women's cancer, children's cancer. Funding is only half completed for the women's cancer chair, and support is still needed for the Children's Cancer Research Fund Endowed Chairs. Additional endowed chairs will also be established, to further research in other cancer areas and to attract top researchers to the University.

Soon the new Cancer Center will be a reality. With continued support, the facility will enable accelerated cancer research at the University of Minnesota — research which will impact thousands of individuals. "The University of Minnesota Cancer Center will mean many things to people throughout the state and the Upper Midwest," says General Chair Win Wallin. "Most important, it will be a regional resource for developing new and innovative treatments to benefit all who are touched by this dread disease." ■

Natasha Frost

A Grand Celebration

Thirty-eight years ago, the Freemasons of Minnesota gave 500 silver dollars to support cancer research and patient treatment at the University of Minnesota. It was the start of a strong tradition. Today the Freemasons and Eastern Star are the largest donors to cancer research, treatment, and education in the University's history, with nearly $17 million in gifts and pledges.

On Saturday, March 26, over 300 Minnesota Masons witnessed the cornerstone dedication at the future site of the Masonic Cancer Research Building. The Masons contributed $5 million to the Fund for the University of Minnesota Cancer Center, and the new building will bear their name.

Grand Master Warren K. Clark conducted the ceremony, which followed a parade of Masons in formal dress, including feathered hats and jeweled vests. The procession began at the Radisson Metrodome Hotel and moved down Harvard Avenue to the dedication site at 425 E. River Road. The traditional Masonic ceremony included the anointing of the cornerstone using corn (for nourishment), oil (for joy), and wine (for refreshment).

The Masons of Minnesota first made a commitment to help cancer patients and their families in the 1950s. They raised $1 million for the Masonic Cancer Center, which opened in 1958 on the University campus. In 1960 they received the University of Minnesota's Regents' Award for their efforts in the fight against cancer.

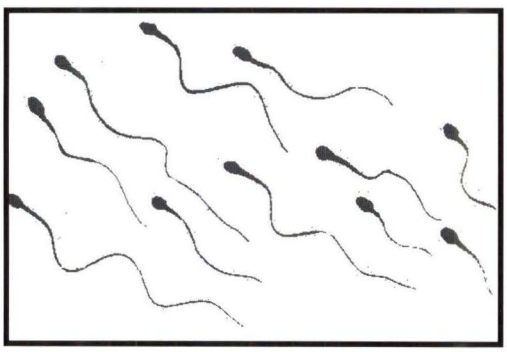
The Minnesota Masons approved funds to add two floors to the building in 1963, and in 1970 established a Professorship in Oncology. In 1981 they provided additional funds for more laboratory space and a new Oncology Clinic.

With the construction of the new Masonic Cancer Research Building, the Masons of Minnesota once again confirm their support of the University of Minnesota and its efforts to win the battle against cancer. Dr. John Kersey, acting director of the Cancer Center, told the crowd that this was "the beginning of a new era, with a building that we desperately need to continue our cancer research." ■

Male infertility — it's not a typical dinner conversation topic for most people. But for three young doctors in the University of Minnesota's Department of Urologic Surgery, it is typical. It's a topic they discuss nearly every day. The enthusiasm these doctors feel for their work and the future of their department is obvious as they talk about their research and their colleagues.

Investigating Infertility

Department of Urologic Surgery researchers work toward new knowledge in the field of infertility.



by Jodi Ohlsen Read

"The interaction with other researchers is amazing. It's a very stimulating environment," says Jon Pryor, M.D. "Every Tuesday at 5:00 p.m. we meet over pizza to share information and ideas about what we're working on. It's fantastic, everybody offers encouragement, opinions, and new ideas. And, the support and critique at these weekly meetings is only one part of the unique atmosphere in the department."

Pryor is one member of the recently expanded team working on male infertility and related issues. Two other team members, Kevin Billups, M.D. and Ken Roberts, Ph.D., were successfully recruited by the department last year through a combined effort with David Hamilton, Ph.D., head of the Department of Cell Biology and Neuroanatomy, former Dean David Brown, and the Medical School. Billups, recruited from the University of Virginia, and Roberts, from Johns Hopkins University, add impressive strength to the area and to the department as a whole.

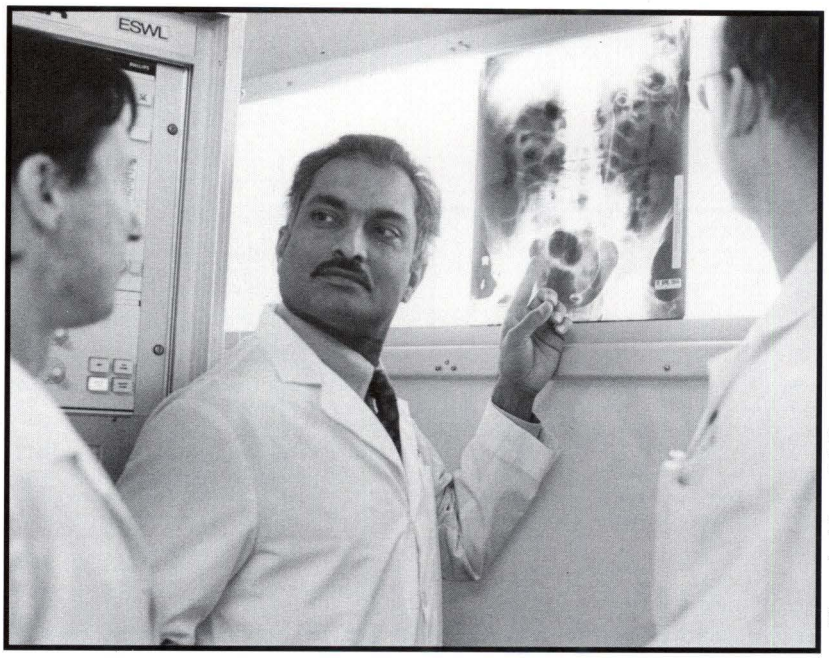
"We are continuing to draw prestigious people," says Pratap Reddy, M.D., clinical chief and interim head. "As a leader in many areas of urology, we are striving to be one of the top departments in the country."

Pioneering new treatment options

The Department of Urologic Surgery specializes in several areas, including urologic oncology, prostate diseases, bladder replacement, kidney stones, minimally-invasive surgery, pediatric urology, sexual dysfunction, and infertility.

Traditionally, surgery has been the most common treatment for benign prostate enlargement but in the last five years, the University has been a pioneer in promoting and exploring non-surgical treatment. "The University has also been a forerunner in screening and providing new treatment options for prostate cancer," says Reddy.

Reddy, a specialist in bladder cancer and reconstructive surgery, was the first to construct a successful internal bladder using sigmoid colon. The department has also been a leader in developing and defining percutaneous treatment of kidney stones. "Our faculty is innovative and productive, continually looking into new treatments for different disease processes that are significant," says Reddy. "We have a strong department, both clinically and in basic research."



Photos by Nancy Mellgren

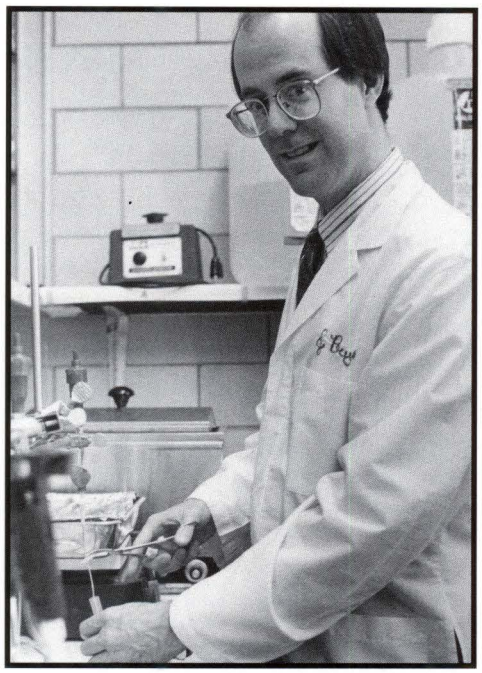
The combination of clinical work and research was a major draw for for Billups, who divides his time between seeing patients and conducting research. "The cooperation between the different areas is very important to me," he says. "The University values clinicians and surgeons who also want to do research. And, the senior faculty is supportive of the junior faculty."

Billups' clinical practice is in male infertility, impotence, and inflammatory disorders. His research focuses on the investigation of endothelial cell activation during acute and chronic inflammation. He also has an interest in the development of magnetic resonance imaging (MRI) techniques to evaluate testicular blood flow and metabolism.

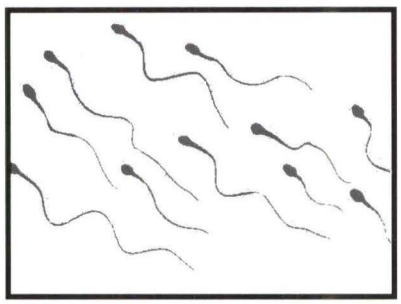
"It was my interest in inflammatory disease that led me to study infertility," says Billups. "And now, in my current research I am studying acute and chronic inflammation." Inflammation is a local vascular response to injury, characterized by capillary dilation, infiltration of leukocytes (white blood cells), redness, swelling, and often, a decline or loss of tissue function. It is a factor in many clinical conditions, including bacterial infections (prostatitis, cystitis, and sepsis) and ischemia/reperfusion injury (myocardial infarction, stroke, and transplantation).

"Inflammatory disorders can adversely affect every major organ system and are one of the major sources of morbidity and mortality in medicine today," says Billups. "There is a lot that could be done to help patients with inflammatory conditions. Once we understand how acute inflammation is triggered and how it works, then we can regulate it."

Billups is exploring the molecular aspects of inflammatory disease, including examining how white



Above: Dr. Pratap Reddy evaluates an x-ray with residents. Below: Dr. Jon Pryor prepares a sample of polyA+ RNA from epididymal tissue.



blood cells adhere to endothelial cells. Specifically, he is looking at the earliest events that occur during an acute inflammatory response triggered by ischemic injury. According to Billups, one of those early events may be the expression of endothelial cell adhesion molecules. He is studying one particular adhesion molecule, E-selectin, that is found only on activated endothelial cells.

"E-selectin has been shown to be one important mediator of early white blood cell (leukocyte) adherence to endothelial cells," explains Billups. "Understanding leukocyte adhesion will help us regulate it and could affect many areas. In fact, blocking white blood cell adhesion may decrease the reperfusion injury seen after ischemia in organs such as the heart, kidney, and brain.

"Ultimately, I hope to understand how white blood cell adhesion is regulated during the early, peak, and declining phases of an acute inflammatory response," he says. "Long term, my goal is to develop new therapeutic approaches to decrease tissue damage and preserve organ function in patients with inflammatory disease."

In the future, Billups also plans to work with MRI to study blood flow in patients with varicocele (a varicose enlargement of the spermatic cord veins). Results from that work could help improve diagnosis of testicular function.

The Department of Urologic Surgery faculty come from a variety of backgrounds and have numerous clinical and research interests. This variety gives unique strength to the department.

Peter Bernhard, M.D., assistant professor; staff urologist, VA Medical Center
Dr. Bernhard's interests are endourology, laparoscopic surgery, and urologic oncology. He is in charge of the medical students and conducts clinical research at the VA Medical Center.

Kevin L. Billups, M.D., assistant professor
Dr. Billups is interested in male infertility, erectile dysfunction, and inflammatory disorders of the urogenital tract. His research focuses on the investigation of endothelial cell activation during inflammation and on the development of magnetic resonance imaging techniques to evaluate testicular function.

Cesar Ercole, M.D., assistant professor; urologist, St. Paul-Ramsey Medical Center
Dr. Ercole is interested in the detection and treatment of prostate cancer and the treatment of benign prostatic hyperplasia. He is directing a variety of research projects on the detection and management of benign and malignant prostate disease. He also supervises a course in microsurgery.

Richard M. Evans, M.D., assistant professor; acting chief of urology, VA Medical Center
Dr. Evans' interests include laparoscopic surgery, endourologic surgery, and lasers in the treatment of ureteral stones. He runs a laparoscopic laboratory for training and clinical research.

Paul Gleich, M.D., assistant professor; co-director, residency training program; chief of urology, St. Paul-Ramsey Medical Center
Dr. Gleich is interested in urodynamics, urinary tract trauma, management of urolithiasis, and medical informatics. He is developing a curriculum to prepare residents for the use of computers in a clinical setting.

continued on page 18

Implications for infertility treatment

Like Billups, Pryor also combines clinical work and research. He spends about half of his time seeing patients, where he specializes in male infertility and erectile dysfunction, and the other half on research. One of his goals is to develop a better understanding of reproduction and the related problems of treating infertility.

Pryor joined the Department of Urologic Surgery faculty in 1991, after studying cell biology of the epididymis under Hamilton. He continues to focus his research on the epididymis — specifically, on the potential importance of the epididymis on sperm's ability to fertilize.

"How does the epididymis interact with the sperm? When the sperm are in the caput (the head) of the epididymis, they are immature," ex-

plains Pryor. "As they pass through the epididymis (see diagram), they mature. Little is currently known about exactly how the epididymis and the sperm interact. Through my research, I hope to find out how it affects the sperm."

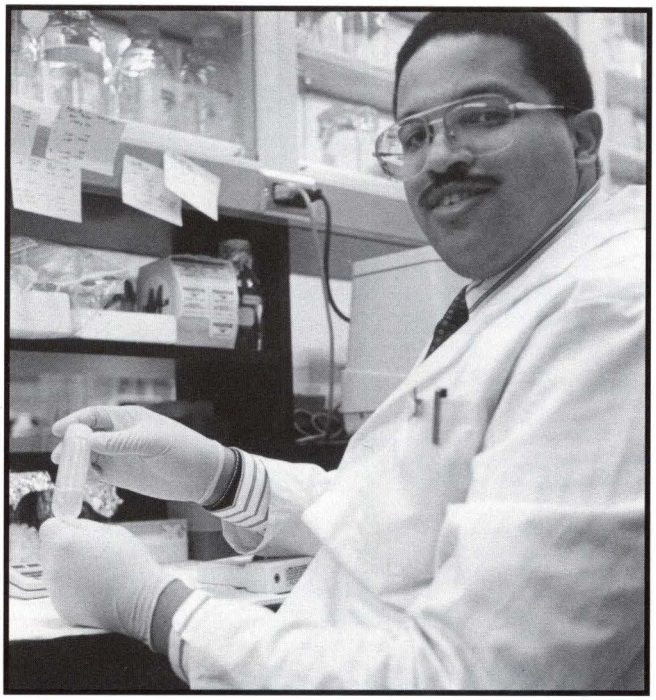
Sperm mature in a region-specific way and some proteins in the epididymal fluid may also be region specific. As the sperm move through the epididymis, they show increased motility. "It is thought that some of the unique proteins in epididymal fluid may be involved in the sperm maturation," says Pryor.

Studying region-specific proteins is difficult because of the similarity in the caput and cauda epididymal fluid. With new techniques of subtractive immunization Pryor may be able to produce several region-specific antibodies. Using those antibodies as tools he can then examine the effect epididymal proteins have on sperm development.

Results from this research could have implications for many areas of infertility treatment. "For example, when reconnecting a vasectomy, it would be helpful to know how high up the epididymis the reconnection should be. If it is higher up on the epididymis, will the sperm be fertile? Possibly. Or perhaps an infertile patient is missing one of these important epididymal or sperm proteins. These are things we hope to find out," says Pryor. "The results could also be instrumental in developing a male contraceptive."

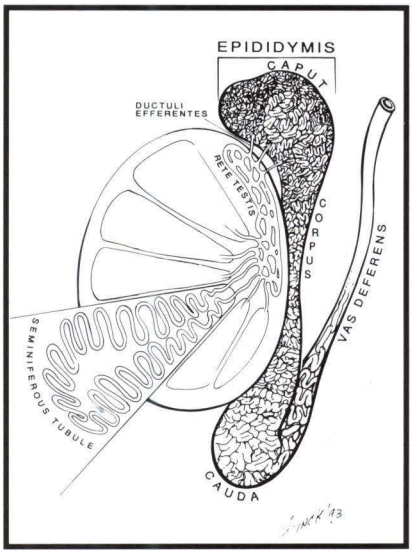
The research Roberts is conducting could also affect infertility treatments and contraception. Before the sperm enters the epididymis, even before it actually is sperm, it is a germ cell, imbedded in the seminiferous tubule of the testicle. How does the germ cell transform into an actual sperm cell? That, spermatogenesis, is what Roberts is working to understand.

"Looking at a cross section of the testicle, one would see that it is made up of tube-like structures called seminiferous tubules," explains Roberts. "In the tubule is the Sertoli cell, an epithelial cell that gives the tubule its structure. Imbedded near the outer wall of the tubule are the germ cells, spermatogonia, that will eventually become sperm cells. The germ cell depends on the Sertoli cell to help it develop."



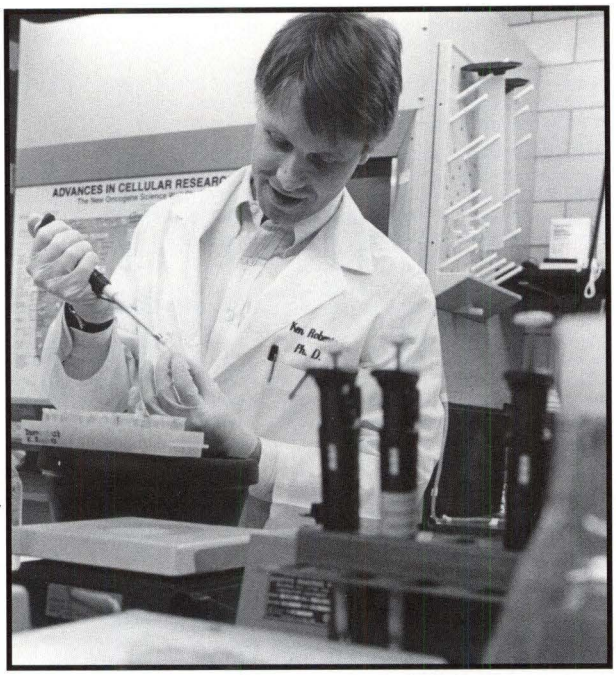
Dr. Kevin Billups' research focuses on inflammatory disease.

Below: diagram of the epididymis.



As the cell moves toward the center of the tubule it changes into a spermatozoa. The spermatozoa is released into the center of the tubule and moves through the tubules into the epididymis, where it matures into a fully functional sperm.

What happens to the germ cell that allows it to change? The Sertoli cell, also called a "nurse" cell, plays a supportive role, providing the germ cells with what they need to develop.



Kenneth P. Roberts, Ph.D., assays a Sertoli cell line for transferrin gene expression.

Products of the Sertoli cell are secreted into the area where the germ cells grow. Those products and their regulation are the focus of Roberts' research.

As the newly formed spermatogonia move toward the center of the tubule, the Sertoli cell connects with other Sertoli cells to isolate the spermatogonia. "It is believed that this barrier, the blood/testis barrier, protects the spermatogonia," says Roberts. "Because of this barrier, the Sertoli cell must provide the nutrients that germ cells need to develop. One very important nutrient is iron."

Transferrin, a protein made by the Sertoli cell, moves needed iron to the germ cells. Roberts is studying transferrin gene expression as a model to better understand the regulatory events required for spermatogenesis. "Transferrin is a good model because we know what it is, what it does, and that it is very regulated," he says. Through this work, Roberts aims to understand the molecular mechanisms that control gene expression in the Sertoli cell, and potentially affect infertility treatments and possibly contraception.

Each of these research projects, and each doctor, is adding vital information to the base of knowledge about male infertility and related disorders. Through their ambition and dedication, they help maintain and develop the Department of Urologic Surgery's reputation as one of the best in the country. "We strive to be a leader in our field," says Reddy. "We strive to provide excellent patient care, exceptional resident education and training, and to promote clinical and basic research." ■

Department of Urologic Surgery faculty *continued from page 16*

John C. Hulbert, M.D., professor, director, University of Minnesota Kidney Stone Center
Dr. Hulbert has a special interest in urinary stone disease, including percutaneous renal surgery, ureteroscopic surgery, and shock wave lithotripsy. He runs a specialized fellowship training for post-residency fellows in endourology and laparoscopic urologic surgery, one of the few in the country.

Jon L. Pryor, M.D., assistant professor
Dr. Pryor specializes in male infertility, erectile dysfunction, and vasectomy reversal. His research focuses on cell and molecular biology of reproduction with support from the National Institutes of Health.

Pratap Reddy, M.D., professor; clinical chief and interim head; director, Residency Training Program; chief of urology, VA Medical Center
Dr. Reddy specializes in oncology, endourology, and reconstructive surgery. He runs several clinical research projects, particularly involving the prostate gland.

Yuri Reinberg, M.D., assistant professor, Department of Urologic Surgery and Department of Pediatrics
Dr. Reinberg is interested in pediatric urinary incontinence and diseases of sexual differentiation.

Kenneth P. Roberts, Ph.D., assistant professor
Dr. Roberts' research goal is to better understand the endocrine and paracrine control of spermatogenesis by studying the regulation of Sertoli cell function. He is also examining how testosterone regulates spermatogenesis.

Kevin Zhang, M.D., assistant professor; staff urologist, VA Medical Center
Dr. Zhang's main interests are in urologic oncology, bioengineering applications in urology, and reconstructive urologic operations and complicated renal procedures.

Students match up with residency programs

Primary care residencies were the most popular choices at Match Day, held March 16. Of 209 graduating University of Minnesota medical students, 52 percent chose residencies in primary care, which includes family practice, pediatrics, and medicine. Family practice drew the most students with 25 percent and medicine was second with 14 percent.

The National Residency Match program, which matches fourth-year medical students with medical

Medical students mark their residency locations at Match Day.

residency programs, matched 17,405 students nationwide. Students rank their choice of residencies, the institutions rank their candidate preferences, and the computer completes the match.

Most University medical students, 79 percent, received their first or second residency choice. More than half of the students will remain in Minnesota and 29 percent of those will stay at the University. ■

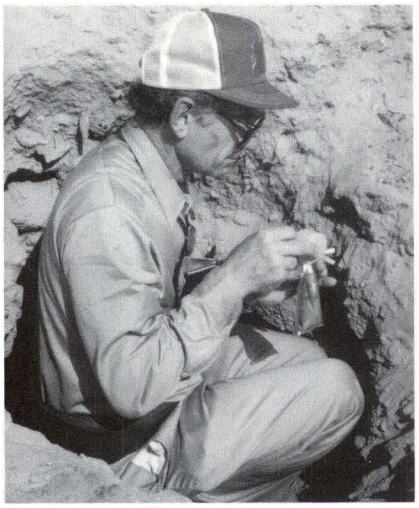
University and Medical School officials break ground for the new Basic Sciences/Biomedical Engineering Building.

Officials break ground

University of Minnesota Medical School Dean Shelley Chou and others broke ground for the new Basic Sciences/Biomedical Engineering Building on April 7. The new $62.7 million building will provide research and laboratory space for many of the Medical School's basic science programs, including biochemistry, cell biology and neuroanatomy, laboratory medicine and pathology, pharmacology, and physiology. It will also house the Biomedical Engineering Center. The University's basic science faculty attract more than $25 million annually in research support. ■

Caffeine affects kids: positives and negatives

In a recent study, children consuming caffeine had improved manual dexterity and attention to detail but were more anxious. Researchers tested healthy children ages 8-12 after they drank carbonated beverages with and without caffeine. Children who drank caffeine reported side effects including feeling sluggish and nervous or anxious. Results of the study, led by ***Dr. Gail Bernstein,*** assistant professor in psychiatry, were published in the March issue of *Journal of the American Academy of Child and Adolescent Psychology*. ■



Dr. Arthur Aufderheide

Scientists find TB in mummy

Tuberculosis (TB) may have been around 900 years ago, long before Europeans came to North America. ***Dr. Arthur C. Aufderheide,*** professor in the Department of Medicine, University of Minnesota School of Medicine in Duluth, and several other scientists who examined a 900 year-old mummified Peruvian woman found evidence that TB was present long ago.

As reported in *Proceedings of the National Academy of Science* March 15 issue, the researchers used a DNA-amplifying polymerase chain reaction (PCR) to locate TB bacteria DNA. Aufderheide gave samples of the mummy's lung tissue to colleague ***Dr. Wilmar L. Salo,*** associate professor of medicine, who then, using PCR, found a DNA segment that matched the modern TB bacteria DNA.

According to Aufderheide in the March 25 issue of *Science*, DNA from mummies and skeletons, along with the PCR techniques, may help them track ancient epidemics. ■

DNA used to test for Lyme disease

Although blood tests detect Lyme disease in most infected patients — about 90 percent — some people with the disease have negative blood tests. University researchers have used a DNA expanding technique to diagnose Lyme disease in patients who show no signs of Lyme bacteria in traditional culture tests.

Dr. Jesse Goodman, associate professor, Department of Medicine, Infectious Disease, believes the DNA method can help doctors better target treatment in some patients. The method uses a test, the polymerase chain reaction (PCR), to look for Lyme bacteria DNA.

Goodman, who collaborated with ***Drs. John Bradley*** and ***Russell C. Johnson,*** published the results in the March 15 *Annals of Internal Medicine*. ■

Biochemistry

Dr. David Thomas, professor, received a Merit Award Grant of $1,472,000 from the National Institutes of Health (NIH) to study molecular dynamics of muscle contraction. ***Dr. Leonard J. Banaszak,*** professor, received a National Science Foundation grant to research protein engineering of citric acid cycle enzymes.

Cell Biology & Neuroanatomy

Dr. H. Joseph Yost, assistant professor, received a 1994 McKnight Professorship Grant. ***Dr. Martin W. Wessendorf*** joined the faculty in April as assistant professor, with research specializing in neuroscience.

Community-University Health Care Center/ Variety Club Children's Clinic

Dr. Nina Bacaner joined the staff as an internist. Several members of the Internal Medicine faculty, UMHC, have joined the clinic to provide primary health care. These include ***Drs. Jeff Balke, Greg Plotnikoff, Jesse Goodman, Barbara Daniels,*** and ***José Barbosa.***

The clinic currently has 25 ongoing service programs grants for patient care, including a new grant from the State Bar Association for pro bono legal services.

Dermatology

Dr. Mark Dahl was elected vice president of the Society for Investigative Dermatology, which is the world's largest organization devoted to skin research. ***Dr. Peter Lynch*** has been elected president of the Association of Professors of Dermatology, an organization consisting of the chairs of all the U.S. departments of dermatology.

Dr. Jeannie Larson, who is board certified in otolaryngology and head and neck surgery as well as in dermatology, has joined the department as clinical assistant professor.

Epidemiology

Dr. Carolyn Williams, associate professor, has been elected to fellowship in the American Psychological Association. The award recognizes outstanding and unusual contributions to psychology.

Laboratory Medicine & Pathology

Dr. Daniel Mooradian, assistant professor, was named one of 11 recipients of the 1994 University's McKnight Land-Grant Professorships. ***Dr. Harry Orr,*** professor, was featured in the December 8 edition of the *Wall Street Journal* for his research on ataxia. ***Dr. James McCarthy,*** associate professor, was named to the Graduate School Fellowship Committee. He also was awarded an American Cancer Society grant. ***Dr. Leo Furcht,*** professor and head, was appointed to the University's Public Private Partnership Committee. ***Dr. John Kersey,*** professor and acting director of the Cancer Center, was elected councilor of the American Society of Hematology.

Dr. Chris Pennell, assistant professor, and ***Dr. Rod Fedderson,*** assistant professor, received R29 research awards from the National Cancer Institute. ***Dr. Gundu Rao,*** professor, and ***Dr. Bill Gleason,*** assistant professor, received funding from the Biomedical Interfacial Program of the Center for Interfacial Engineering. Rao also received seed money support from the Council of the International Society of Thrombosis and Haemostasis to organize an education conference on advances in the mechanisms and detection of coronary thrombosis in India.

Dr. Gregg Fields, assistant professor, was named editor of *Letters in Peptide Science*. ***Dr. Carol Wells,*** associate professor, was named as a member of the editorial board of *Critical Care Medicine*. ***Dr. Henry Balfour, Jr.,*** professor, was elected vice chair of the executive committee of the NIH-sponsored AIDS Clinical Trials Adult Group. ***Dr. William Swaim,*** professor, joined the editorial board of the *American Journal of Clinical Pathology*.

Medicine

The National Institutes of Health awarded a Center of Excellence Award in Molecular Hematology to the University of Minnesota with ***Dr. Gordon Ginder*** as principal investigator. Minnesota was one of seven centers in the U.S. chosen for the award.

Dr. Thomas Hostetter was elected to the Association of American Physicians. He is the eleventh member of the department to be elected to the prestigious organization. ***Dr. Connie Parenti,*** assistant professor, was appointed to the United States Medical Licensing Examination (USMLE) Step 2 Test Material Development Committee for Medicine.

In March, ***Dr. Jay Cohn,*** professor and head of the cardiovascular division, was elected vice president of the International Society of Hypertension at the biannual meeting in Melbourne, Australia.

Microbiology

Dr. Ashley Haase was an author of the fourth most cited paper for 1993 as listed in *The Scientist's* "Ten Most Cited Papers for 1993." The paper was titled "Massive covert infection of helper T lymphocytes and macrophages by HIV during the incubation period of AIDS" and was originally published in *Nature*.

Neurology

Dr. Richard W. Price, professor and head of the department, was appointed editor of the new *Journal of Neuro-AIDS*. ***Dr. Ilo Leppik,*** clinical professor of neurology and pharmacy, has been elected president of the American Epilepsy Society.

Neurosurgery

The third annual Shelley N. Chou Lectureship and Banquet is scheduled for June 10 and 11. This year's banquet speaker and lecturer is ***Dr. C. Miller Fisher,*** a neurologist at Massachusetts General Hospital/ Harvard Medical School.

Dr. Stephen J. Haines, professor, was elected president of the Congress of Neurological Surgeons in April. ***Dr. Edward L. Sjeljeskog,*** professor, recently became president of the American Association of Neurological Surgeons.

Orthopaedic Surgery

Dr. Roby C. Thompson, professor and head, received a five-year NIH grant, totalling $787,011. His research will study the degradation and repair processes that occur after acute joint trauma. Thompson is principal investigator and other investigators include ***Dr. Jack Lewis,*** head, Orthopaedic Biomechanics Laboratory; ***Dr. Ted Oegema,*** head, Orthopaedic Biochemistry Laboratory; and ***Dr. Larry Wallace,*** Small Animal Clinical Sciences Department.

A new Orthopaedic Department Hand/Sports Medicine/Low Back Center was established this spring at 2221 University Avenue SE, Minneapolis.

Pediatrics

Dr. David M. Brown, director of the division of pediatric endocrinology, was named to the Board of

Trustees of the American Association for Accreditation of Laboratory Animal Care.

The pediatric residency program was chosen by the Ambulatory Pediatric Association to receive the 1994 Outstanding Teaching Award.

Pharmacology

Dr. Paul Sammak was awarded a research grant from the American Lung Association to study pulmonary endothelial autacoids that stimulate wound healing. ***Dr. George Wilcox*** received a four-year research grant from the National Institute on Drug Abuse for $447,299.

Radiology

Drs. Arthur Stillman, James Walsh, and ***Steve Trenkner*** received a grant from Sterling Winthrop Pharmaceuticals, Inc. to study the Phase III clinical protocol for liver lesion detection and characterization using hepatocyte specific MRI contrast agents. ***Dr. Lenore Everson*** is continuing to use MRI in breast research and is studying abnormal mammographic lesions as well as post-surgical and post-radiation breast changes. ***Dr. Michael Jerosch-Herold*** received an Exxon Education Foundation Grant for the development of magnetic resonance methods for quantitative measurement of fluid flow and diffusion in tortuous flow paths. ***Dr. Haraldur Bjarnason*** will conduct a comparison of balloon occlusion angiography and MRI in diabetic patients along with ***Dr. Bill Austin*** and other faculty members.

Dr. Robert Boudreau was listed in *The Best Doctors in America*. Three new faculty members were appointed: ***Drs. Charles L. Truwit, Kent B. Remley,*** and ***Michael T. Madison.***

Surgery

Dr. David Dunn, professor of surgery and head, Surgical Infectious Diseases, is president-elect of the Association of Academic Surgeons. He was also appointed to the Pre- and Post-operative Care Committee of the American College of Surgeons, and member of the NIH surgery, anesthesiology, and trauma study section.

The 1994 Surgical Alumnus of the Year is ***Dr. Donald J. Ferguson,*** professor emeritus, University of Chicago; he will give a talk June 14, "Notes from the Operating Room," at the Minnesota Surgical Residents Society's annual meeting.

The department's 58th Annual Course, "Progress in Hepatic, Biliary, and Pancreatic Surgery," takes place June 15-18. ***Dr. Henri Bismuth,*** surgery chair, Hospital Paul-Brousse, Paris, is the 62nd E. Starr Judd Lecturer. More than 600 people usually attend the four-day course, directed by ***Drs. John Najarian*** and ***John Delaney.***

The 40th anniversary of the first cross-circulation open-heart operation, by ***Dr. C. Walton Lillehei,*** was March 26.

Therapeutic Radiology

Dr. Fatih Uckun, professor of therapeutic radiology-radiation oncology and pharmacology, received the 1994 Research Award from the Radiation Research Society.

School of Public Health

Drs. Bryan Dowd, Roger Feldman, and ***Will Manning,*** professors in the School of Public Health's Institute for Health Services Research, are listed in the *Directory of Health Care Experts* compiled by the Heritage Foundation in Washington, D.C. ***Dr. Carolyn Williams,*** associate professor of epidemiology, was elected to fellowship in the American Psychological Association. In March, ***Dr. John Potter,*** professor, delivered the Roland Phillips Memorial Lecture at the 62nd annual postgraduate convention at Loma Linda University, California.

UMD School of Medicine

Dr. David Eide, assistant professor of biochemistry and molecular biology, is one of 11 recipients of the McKnight Land-Grant Professorship. He is the first from the UMD School of Medicine and the second from UMD to receive the honor.

Dr. Byron Crouse was appointed chair of the Department of Family Medicine at the School of Medicine in Duluth. ■

MMF Grant Recipient: LaDora V. Thompson, Ph.D., P.T.

As people age, they often have more difficulty performing daily activities, partly due to a decline in skeletal muscle function. This muscle function may also be affected by the extended bedrest, or prolonged inactivity, typical during hospitalization.

LaDora V. Thompson, Ph.D., P.T., Department of Physical Medicine and Rehabilitation, is conducting research to find out what happens to specific muscle fiber types during prolonged inactivity. "Many people from various areas of study do say that prolonged inactivity can be detrimental to different body systems. But, there has not been sufficient research in how prolonged inactivity specifically affects the muscles," says Thompson.

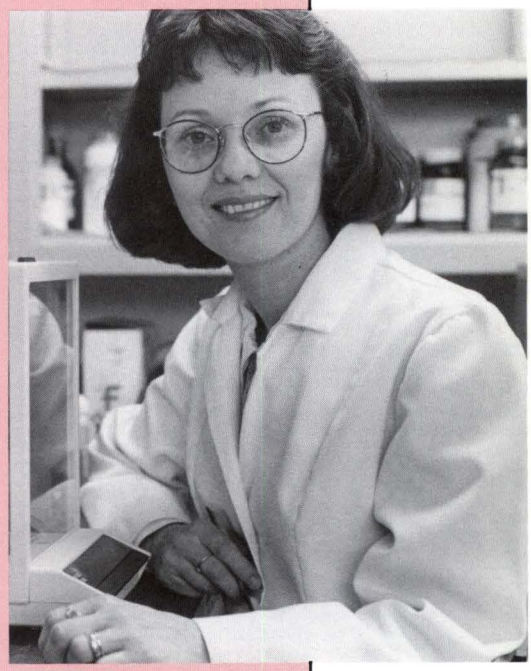
Thompson received a $17,000 grant from the Minnesota Medical Foundation (MMF) to purchase equipment for the research project. The equipment includes a basic instrument OPTIS, used to study muscle fibers by measuring force. The basic instrument OPTIS is a complete muscle research system, including a force transducer, muscle fiber mounting tweezers, vacuum system, cuvette, integrated solution containers, and microscope. Other laboratory equipment to be used to complete the studies includes a Cambridge Muscle Lever System, which measures force-velocity, and a gel electrophoresis system, primarily used to identify fiber-type dependent changes.

Thompson was one of nine faculty members to receive a special grant from MMF. In all, the MMF board approved $151,350 in faculty and student grants at its winter meeting (see accompanying article).

"Previously, research has been on whole muscles and whole systems but now, because of state-of-the-art equipment, we can look at the skeletal muscle function on a cellular level," says Thompson. In her research, she will be studying the effects of simulated prolonged inactivity on specific muscle fiber types of aged male rats.

The model to be used with the rats to simulate prolonged inactivity has also been used by NASA to study weightlessness and zero gravity. "When people come off prolonged inactivity we expect that they may have problems with standing and walking, just as astronauts coming out of zero gravity," explains Thompson.

Slow-twitch muscle fibers, which are most prevalent in anti-gravity muscles, may be more affected by prolonged inactivity than fast-twitch fibers. Fast-twitch and slow-twitch fibers are two of the muscle fiber types that make up mammalian skeletal muscles which are heterogenous — a mix of fiber types. Slow-twitch fibers are type I, like the muscles a long-distance runner uses in a marathon. The muscles used in sprinting are examples of fast-twitch fibers, which are type II fibers. Through her research, Thompson hopes to find out how the specific fiber types react to prolonged inactivity. She aims to determine whether skeletal muscle mass and single cell mass are altered following prolonged inactivity and whether specific force and stiffness are also altered.



LaDora V. Thompson, Ph.D., P.T.

"Some believe that we can change muscle fiber types by chronically stimulating the muscle, but normal use, even heavy exercise and training, do not change the fiber types. It is possible within the existing fiber types to change the contractile properties — how fast the muscle responds and the force it generates — of a slow-twitch muscle fiber to make it more like a fast-twitch muscle fiber," says Thompson. "This research could help us determine which exercises would be most beneficial to bed-ridden patients and to learn which exercises, directed at specific fiber types, would be best for recovery from prolonged inactivity."

Development of exercises specially targeted to the muscles affected by prolonged inactivity is one possible application for the results from this research. Intervening with these exercises could improve recovery time following extended prolonged inactivity. "Quality of life and effective treatment are the ultimate goals," says Thompson.

Thompson received her Ph.D. from Marquette University, Milwaukee, Wisconsin, and was a postdoctoral fellow in the Department of Biology, Marquette University. She also served as a NASA research associate from 1992-93 and joined the University of Minnesota faculty in 1993. ■

MMF approves $151,350 in grants

At its winter quarterly meeting, the Minnesota Medical Foundation board of trustees approved $151,350 in research and special grants. The amount includes $61,000 in faculty research grants, $86,750 in special grants for equipment, and $3,600 in student research grants.

FACULTY GRANTS include: ***David M. Brown, M.D.,*** Pediatrics and Laboratory Medicine and Pathology, $6,000, Nitric oxide and renal hemodynamics in diabetic rats; ***Stanley M. Finkelstein, Ph.D.,*** Laboratory Medicine and Pathology, $2,000, Adherence maintenance and early detection of infection/rejection in lung transplantation; ***Jesse L. Goodman, M.D.,*** Medicine, $7,000, Pathogenesis and diagnosis of human and experimental Lyme disease; ***Paul Letourneau, Ph.D.,*** Cell Biology and Neuroanatomy, $4,500, Regulation of neuronal integrins by inhibitory ECM molecules; ***Sharon Davis Luikart, M.D.,*** Medicine, $7,000, A novel macrophage differentiation factor; ***Linda Kirschen McLoon, Ph.D.,*** Ophthalmology, $3,000, Unique N-CAM expression in extraocular muscles; ***Robert D. Nelson, Ph.D.,*** Dermatology, $8,500, Spatial distribution of adherence receptors on human vascular endothelial cells; ***Sabita Roy, Ph.D.,*** Surgery and Pharmacology, $3,500, Mechanisms of morphine induced immunosuppression; ***Ronald L. Schut, M.D.,*** Medicine, $5,000, Parvovirus B19 infection in HIV-positive patients; ***Keith M. Skubitz, M.D.,*** Medicine, $6,000, Characterization of a neutrophil ecto-protein kinase; ***Clifford J. Steer, M.D.,*** Medicine, $6,000, Retinoblastoma gene expression in hepatocellular carcinoma; and ***Edward H. Szachowicz, M.D., Ph.D.,*** Otolaryngology, $2,500, Cartilage engineering using a biodegradable implant: An *in vitro* and *in vivo* study.

SPECIAL GRANTS include: ***Joseph R. Bloomer, M.D.,*** Medicine, $5,000, Investigations on the molecular basis for protporphyria: Analytical instrumentation; ***Michael D. Caldwell, M.D., Ph.D.,*** Surgery, $5,000, Nitric oxide in the artery wall; ***Craig A. Henke, M.D.,*** Medicine, $15,000, Migration-associated endothelial cell matrix receptors; ***Jon M. Holy, Ph.D.,*** Anatomy and Cell Biology, UMD, $10,000, Molecular characterization of the centrosome; ***Allison Hubel, Ph.D.,*** Laboratory Medicine and Pathology, $10,000, Request for matching funds for the purchase of a freeze-dryer; ***Costantino Iadecola, M.D.,*** Neurology, $11,000, Mechanisms of pial arteriolar dilatation by parallel fiber stimulation; ***Patrick W. Mantyh, Ph.D.,*** Psychiatry, $3,750, High resolution imaging of CNS molecules in health and disease; ***La Dora Thompson, Ph.D.,*** Physical Medicine and Rehabilitation, $17,000, Contractile properties of aged skeletal muscle fibers; and ***Li-Na Wei, Ph.D.,*** Pharmacology, $10,000, Cryostat: Instrumentation for in situ hybridization.

STUDENT GRANTS include: ***Amal Murarka,*** $1,800, *In vitro* and *in vivo* models of human neuroblastoma and the evaluation of novel therapeutic options; and ***Aaron Tsai,*** $1,800, Are Teller acuity cards an accurate predictor of future visual acuity for infants and children with congenital cataracts? ■

Signing the ISP affiliation are, standing left to right: Richard Range; Merilyn Cummings, president elect; Susan Durkin, treasurer. Seated, left to right, Dr. James Boen, associate dean, School of Public Health; Tom McMorrow, ISP Association; and Dr. David Johnson, vice president, Minnesota Medical Foundation.

ISP Association joins MMF

Recently, the ISP Association, the alumni group from the School of Public Health's ISP, joined MMF as an affiliate. On March 24 a reception and signing ceremony were held to celebrate the new affiliation.

ISP Association is made up of alumni who are medical administrators, including hospital, clinic, mental health facilities, nutritionists, and patient care administrators. The association promotes ISP, an alternative study graduate program for medical administrators, through support of programs including scholarships and mentor programs. For more information call Kathy Carmody at (612) 645-4481 or 374-3209. ■

New members elected to AOA

Thirty-eight students from the 1994 and 1995 Medical School graduating classes have recently been honored with initiation into Alpha Omega Alpha (AOA), a national medical honor society whose purpose is to promote scholarship, encourage high standards in character and conduct, and recognize high academic achievement.

Election to AOA is a distinction that accompanies physicians throughout their professional careers, and is limited to those individuals whose scholastic achievements (pre-clinical, clinical, and National Board scores) place them in the upper 25 percent of their class.

AOA sponsors programs including a visiting professorship, student essay award, and student research fellowships. The Alpha chapter at the University of Minnesota also sponsors scholarships awarded through the Minnesota Medical Foundation to promising medical students in the first two years of medical school.

This year's initiates from the 1994 graduating class include: ***Richard Chase Bosacker,*** Apple Valley; ***Sheryl Lynn Cameron,*** Stillwater; ***Stephanie Kay Carlson,*** Cambridge; ***Suzanne Kay Cossette,*** Minnetonka; ***Jacalyn Anne Dahl,*** Richfield; ***Karen Jean Enockson,*** Golden Valley; ***Christopher Jon Fallert,*** St. Paul; ***John Hardwick Haley,*** Minneapolis; ***James Erik Johanson,*** Excelsior; ***Kerry Michael Kallas,*** Brookfield, Wisconsin; ***Timothy Charles Kleinschmidt,*** St. Cloud; ***Julie Catherine Mayers,*** St. Paul; ***John Michael Menezes,*** Mankato; ***Jennifer Leigh Merchant,*** Edina; ***Alda Ligita Moettus,*** North Olmsted, Ohio; ***Thomas David Mulgrew, Jr.,*** Sacramento, California; ***Timothy Arthur Myers,*** Fergus Falls; ***Jane Kathleen O'Neil,*** South St. Paul; ***Jeffrey Jon Peterson,*** St. Peter; ***Julie Christine Reddan,*** Bloomington; ***Daniel Keling Ries,*** Atlanta, Georgia; ***Pamela Ann Sakkinen,*** East Grand Forks; ***Michael James Severson,*** Bloomington; ***Georgia Kay Taggart,*** Minneapolis; ***Arne Vainio,*** Cook; ***Joy Penelope Walker,*** Stillwater; and ***Jacque Renae Wettlaufer, Winfred,*** South Dakota.

Initiates from the 1995 graduating class include: ***Kathleen Marie Adelgais,*** Oceanside, California; ***Jeffrey James Derr,*** Sauk Rapids; ***Ali Reza Djalilian,*** Rochester; ***Terry LeRoy Falk,*** Park Rapids; ***Vincent Sh-Yeh Fan,*** St. Paul; ***James Russell Hebl,*** Elysian; ***Tycho Erwin Kersten***, Golden Valley; ***Kim Marie Koffler,*** Pine City; ***Nancy Lindberg Struthers,*** St. Louis Park; ***Paul Elliot Meyer,*** Pine Island; and ***Kristin Marie Sufka,*** St. Cloud.■

Major Sports Fantasies, Inc. presents a check for $1,340 to the Bob Allison Ataxia Research Center. The gift came from a Kangaroo Kourt fundraiser at the Twins Fantasy Camp. From left are Major Sports Fantasies Executive V.P. Steve McLeod, Karen Guile, assistant camp coordinator, owner Bob Dowdell, and former Twin George Thomas.

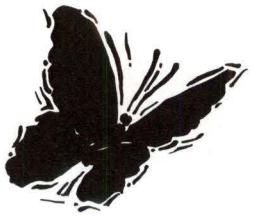
Bob Allison Ataxia Research Center

Former Minnesota Twin Frank Quilici was honored by the St. Paul Minutemen on April 14 for his outstanding community service. The Bob Allison Ataxia Research Center (BAARC) is only one of the organizations in which Quilici is active. He has served on the board of BAARC since its beginning, devoting many hours to fund-raising activities and spreading the word about ataxia. A portion of the proceeds from this banquet were designated for BAARC.

Bob Allison Ataxia Research Center

BAARC is sponsoring another special event this year in conjunction with a Twins baseball game at the Minneapolis Metrodome. This year's event, an evening game against the Toronto Blue Jays, will be held Tuesday, July 5. Tickets will again be available at $100 and $500. Those purchasing $500 tickets will get to enjoy the game from the Twins Skybox with Bob Allison and other former Twins players. For $100 ticket holders, there will be a pre-game reception with the opportunity to meet Bob and other Twins. For more information and to purchase tickets, call the Minnesota Medical Foundation at (612) 625-1440 or 1-800-922-1MMF. ■

Children's Cancer Research Fund



A Cause for Applause '94, a fashion and entertainment event presented by Dayton's as a benefit for the Children's Cancer Research Fund, will be held Thursday, July 28, at the Historic State Theatre in Minneapolis. The evening will begin with a cocktail reception for Patron ticket holders; all ticket levels include the theatric fashion production. Attendees with Patron and VIP tickets may also attend the post-performance gala in Dayton's 8th floor auditorium. Ticket prices are $250 (Patron), $100 (VIP), and $50 (Sponsor). All ticket sales proceeds will go to help support CCRF's research efforts in pediatric oncology and bone marrow transplantation at the University of Minnesota.

Lindsay Bashioum will serve as chair of the A Cause for Applause volunteer committee. Anyone interested in participating with the volunteer committee is encouraged to call the CCRF office at (612) 929-5535. ■

International Hearing Foundation

The International Hearing Foundation (IHF) generates private support for hearing research, education, and awareness programs. IHF supports both clinical and basic otological research at the University of Minnesota's Department of Otolaryngology, with special emphasis given to the Otopathology Laboratory.

The organization promotes advanced educational opportunities for professionals including IHF fellows, clinical fellows, visiting fellows, temporal bone dissection courses, meetings, and symposia. IHF develops and sponsors support groups such as those for Meniere's disease, tinnitus, and acoustic neurinomas, and sponsors services to hearing impaired individuals and related organizations. For more information, contact Dr. Michael Paparella, (612) 339-2836, or the Minnesota Medical Foundation at 1-800-922-1MMF. ■

SUPER

The first edition of The SUPER Report (TSR) was published in April. TSR provides information about Parkinson's disease research activities taking place in the Department of Neurosurgery. The newsletter is sent to supporters, friends, and volunteers of SUPER (Supporters United for Parkinson's Education and Research).

The first annual SUPER Benefit is scheduled for September 18. A benefit performance of "Forever Plaid" at the Hey City Stage in Minneapolis is planned. Call (612) 625-0972 or 1-800-922-1MMF for more information. Nominations for new or additional members for the SUPER board of directors are encouraged. Contact Dale Bahn at (612) 625-0972. ■

University Children's Foundation

The 5th Annual Catch a Rising Star benefit is scheduled for Sunday, August 21, at Minnetonka's Lafayette Club. The garden party theme will include a silent auction, reception, dinner, and dance. Proceeds from the event support research in the Department of Pediatrics.

Nordstrom Mall of America will sponsor the second Back-to-School fashion show on August 27, with all proceeds benefiting the University Children's Foundation. The unique morning show will feature patients from the Department of Pediatrics as models.

The Moonstruck fundraiser will be held September 9 with proceeds benefiting the pediatric cystic fibrosis program. Participants will play nine holes of moonlight golf at the Southview Country Club in West St. Paul.

For more information, call Cynthia Livingston at (612) 626-1904 or 1-800-922-1MMF. ■

University of Minnesota Cancer Center

After reaching its $30 million capital campaign goal in December, the University of Minnesota Cancer Center has now entered its post-campaign fund-raising phase to meet ongoing programmatic objectives. On March 26, the Freemasons of Minnesota performed a traditional Masonic cornerstone ceremony dedicating the new Masonic Cancer Research Building site (see feature article). Bids were awarded and construction commenced in April for the new research facility, which is being erected on top of the existing Dwan Variety Club Cardiovascular Research Center. Occupancy is scheduled for early

1996. The building will contain space for over 30 faculty researchers and is equipped with state-of-the-art laboratories, seminar space, and office areas. For more information about the University of Minnesota Cancer Center, call David Madson, (612) 625-4441 or 1-800-922-1MMF. ■

Variety Club Association

Thanks to the efforts of Variety Club volunteers, children at the Variety Club Children's Hospital can tune in to Radio AAHS (a children's radio station) on the closed circuit network, 24 hours a day. To celebrate this event, Radio AAHS broadcast live from the VCCH lobby on March 21.

Variety Club Association dedicated the Variety Kids' Corner in the Post Anesthesia Care Unit (PACU) on March 24. This special play area has been created through the generosity of Variety Club donor Kim Howard. It includes toys, books, a television and VCR, an aquarium, and adult- and child-sized rocking chairs to help reduce children's anxiety and fear.

Variety Club Association celebrated its 60th Anniversary with a May 15 reception honoring past presidents. Variety Club volunteers continue their commitment to give children the best possible chance for a healthy future through programs at the Variety Club Children's Hospital and Variety Club Children's Clinic. For more information about Variety Club programs, please call (612) 624-6900 or 1-800-922-1MMF. ■

Vision Foundation

Gift of Sight tours were conducted April 28 and May 12 for those interested in education and research to prevent blindness. A reception was held in the John E. Harris Ophthalmology Research Laboratories conference room.

The U of M Eye Open golf tournament was held May 21 for participants in the spring continuing medical education course. Sponsors of the tournament included IO Lab.

The Vision Foundation Awards Banquet took place May 20 in conjunction with the spring continuing medical education course. The Outstanding Achievement Award was given posthumously to Dr. R. Hugh Monahan for distinction in ophthalmology and outstanding achievement and leadership, as viewed by the medical and civic community. The Alumni Service Award was given to Dr. William H. Knobloch, who has invested his career in academic ophthalmology. Carl Lofgren received the Outstanding Service Award in recognition of his service and contributions to the Department of Ophthalmology and the Vision Foundation.

Dr. Malcolm McCannel has contributed a major portion of the funding for a new conference room in the Department of Ophthalmology, to be used for medical students, residents, and fellows.

Thanks to efforts of the Vision Foundation, the Department of Ophthalmology, the Spring Lake Park Lions Club, and Senator David Durenburger, a three-year-old boy from Guyana received treatment for glaucoma. Timothy Floy was treated at the Minnesota Lions Children's Eye Clinic in March. For more information, call (612) 625-1440 or 1-800-922-1MMF. ■

Women's Health Fund

The third annual Celebration of Life luncheon, honoring the University's women cancer survivors, will be held June 11 at the Radisson Plaza Hotel in downtown Minneapolis. This event will feature a silent auction, a celebrity emcee, patient testimonials, and recognition of some of the many major donors to the women's cancer research program. For more information or to attend, please contact Jennifer at (612) 626-3615.

The Ob/Gyn Alumni and Friends Society sponsored its annual reception at the national meeting of the American College of Obstetricians and Gynecologists in Orlando, Florida, on May 9.

The Women's Health Fund sponsored a fund-raising and awareness-building brunch on March 12 at the Minnesota Club. About 30 people attended and heard presentations by Dr. June LaValleur, Dr. Marianne Westerheim, Dr. Linda Carson, and Dr. Leo B. Twiggs.Board member Katherine Grey was named KARE 11 TV's Woman of Distinction for the month of May. The award is given to women who show outstanding leadership on behalf of women and their community. It is sponsored by *Mpls St. Paul Magazine*, *Twin Cities Business Monthly*, Cities 97, and Holland-America Lines.

For more information, call (612) 626-2612 or 1-800-922-1MMF. ■

MAS NEWS

President's Report

I would like to thank the nearly 300 alumni and friends who attended the Medical Alumni Society Social at the Weisman Art Museum on March 9. The evening was an enjoyable time of seeing friends, classmates, and colleagues. We hope to see even more at next year's reception.

The Medical Alumni Society would like to extend an invitation to alumni who live in the Duluth area, or who plan to be in Duluth in July, to an Alumni and Friends Reception. More details will be sent to you soon. Boston area alumni are invited to attend the Minnesota Alumni and Friends Reception on Sunday, October 30, 1994. This will be held in conjunction with the Association of American Medical Colleges Annual Meeting.

We hope those of you who participate in this year's Reunion Weekend will let our alumni office at the Minnesota Medical Foundation know how you like it. The alumni board and staff want the Medical Alumni Reunions to be a meaningful and enjoyable experience. Each year the reunions are evaluated to make them more successful in coming years.

If you would like to play a more active part in the Medical Alumni Society, I encourage you to call the Alumni Office at (612) 625-8676 or 1-800-922-1663. There are options available to everyone, regardless of where you live. For those in the Twin Cities, you can mentor a first-year student, help plan your reunion, or serve on a planning committee. If you live outside the Twin Cities, you can host or meet with a student visiting a resident site in your area or you can help plan a local alumni gathering.

Finally, remember to support the Alumni Annual Fund (the fiscal year at the Minnesota Medical Foundation ends June 30) and become a member of the University Alumni Association. Our alumni office is here to serve you!

Sincerely,

Wayne Liebhard

Wayne Liebhard, M.D., '83
President
Medical Alumni Society

Alumni gather at receptions

Alumni receptions were held in several locations this past winter. Six events were held in California, one in Boca Raton, Florida, and one in the Twin Cities.

In California, Dr. Lydia Seebach, '43, and Keith Wentz (San Francisco), Dr. Jim, '71, and Nancy Patka (Saratoga), Dr. Lloyd, '43, and Lee Gillin (Bakersfield), Dr. George, '31, and Tobette Doroshow (Palm Springs), Drs. David Cannom, '67, and Phyllis Monroe (Los Angeles), and Dr. Jack and Debbie Blum (San Diego) were all gracious and generous hosts to area alumni. Participation in the California receptions continues to grow each year.

In Boca Raton, Florida, alumni and friends enjoyed the hospitality of Dr. Sam, '39, and Linnea Megibow. Dr. Neal Gault, '50, was on hand at this and other receptions to talk about medical education at the University of Minnesota and answer questions.

The new Frederick Weisman Art Museum at the University of Minnesota was the site of the Medical Alumni Society annual social meeting. Nearly 300 alumni and guests enjoyed the new museum and the company of another alumni.

If you are interested in hosting or helping organize an alumni function in your area, please call the Medical Alumni Office at (612) 625-8676 or 1-800-922-1663. Events for next winter are being planned and we hope you will be a part of these activities. ■

AAMC Alumni and Friends Reception to be held in Boston

In conjunction with the Annual Meeting of the Association of American Medical Colleges (AAMC), an Alumni and Friends reception will be held Sunday, October 30, from 6 p.m. - 8 p.m. Alumni attending the conference or those who live in the Boston area are encouraged to attend.

The AAMC Minnesota reception is a unique opportunity to visit with many alumni from around the country and with University of Minnesota Medical Schools faculty (Minneapolis and Duluth).

Further information will be forthcoming to AAMC alumni and Boston area alumni. Please plan on attending and RSVP early. For more information please contact the Alumni office at (612) 625-8676 or 1-800-922-1663. ■

CLASS NOTES

Medical School Dean Shelley Chou, left, and University President Nils Hasselmo, right, present a Trustees Society plaque to Dr. Vincent Paciotti, Class of '47, at the March Presidents Club reception at the Rio Verde Ranch near Phoenix, Arizona. Dr. Paciotti's gift was to the Department of Radiology.

1944

Dr. John William Perry, Hollywood/Huntington Beach, California, was selected as Man of the Year by the Big Ten Club of Southern California. He has been a member of the Big Ten Club, a local sports and social organization of alumni from the Western Conference institutes, since 1963. A long-time sports medicine physician, Dr. Perry served as team physician for several Los Angeles high schools and college athletic teams, for the Washington Redskins and the Los Angeles Rams NFL teams, and for the L.A. Striders track team. He continues to be active in sports medicine. He has attended nearly all Olympic games, some as team physician, since 1960. He was founding director of the Hollywod Presbyterian Medical Center and the California Special Olympics 1969 and remains on both boards.

Dr. Robert J. Strobel, Moscow, Idaho, retired in December from an eye, ear, nose, and throat practice that he says may be one of the last in the nation.

1954

Dr. Oleg Jardetzky, Stanford, California, was recently honored in Austria for his pioneering work in the biological applications of nuclear magnetic resonance (NMR). Currently professor of pharmacology at Stanford University School of Medicine and director of the Stanford Magnetic Resonance Laboratory, Dr. Jardetzky was awarded the Grand Gold Honor Insignia, Austria's highest civilian decoration, on December 21. An international symposium on biological NMR, held at Stanford in March, was organized by his students to honor his career on his 65th birthday. The 1981 monograph "NMR in Molecular Biology," written by Jardetzky and former student G.C.K. Roberts, is considered a classic reference. Dr. Jardetzky also wrote a monograph on the medieval history of Polish noble clans, which was published in 1992.

1962

Dr. Joel O. Brende, Sparta, Georgia, is serving as medical director, admissions services, at Central State Hospital in Milledgeville, Georgia. He is also pursuing interests in post-psychological trauma syndromes and is involved in research, writing, lecturing, forensics, and conducting training workshops. Dr. Brende and his wife have started a publication company, Trauma Recovery Publications. They plan to travel to Russia in September to train Russian mental health workers who help trauma victims.

1963

Dr. Daniel J. Ullyot, Burlingame, California, was installed as president of the American College of Cardiology on March 16 at the 43rd Annual Scientific Session of the College in Atlanta. He currently serves as director of cardiac surgery at Mills-Peninsula Hospitals in Burlingame, as well as clinical professor of surgery at the University of California, San Francisco.

1966

Dr. Stephen L. Hanson, Glenwood, Minnesota, joined Dr. Robert Bösl (class of 1979) in rural family practice in Starbuck, Minnesota, last September.

1969

Dr. Herbert M. Reiman, Jr., Park Ridge, Illinois, began a new position May 1 as chair of the Department of Pathology and Laboratories at Northwest Community Hospital, Arlington Heights, Illinois.

1975

Dr. David Knopman, Minneapolis, associate professor of neurology at the University of Minnesota, recently received the Alzheimer's Association Special Friend award. The award is presented to the person in Minnesota who has contributed the most to meet the needs of families facing Alzheimer's disease.

1978

Dr. Paul D. Snyder, Jr., Santa Fe, New Mexico, joined a satellite of the

Lovelace Clinic Health System in 1992. Since then, he has been appointed satellite medical director for the Lovelace St. Michael's Clinic in Santa Fe. He also continues his full-time practice of general internal medicine.

1979

Dr. Earl C. Lysaker, Jr., West Palm Beach, Florida, was named chair of the Board of Trustees, Palm's West Hospital. He is also continuing in private practice in internal medicine.

1986

Dr. Michael Partington, Denver, completed a neurosurgery residency at the Mayo Clinic in 1992 and a fellowship in pediatric neurosurgery at Children's Memorial Hospital in Chicago. He is now an assistant professor at the University of Colorado and an attending neurosurgeon at the Children's Hospital in Denver.

Dr. Jeffrey D. Wagner, Indianapolis, began a new position as assistant professor of surgery, Division of Plastic Surgery, at Indiana University School of Medicine. He is surgical director of the Indiana University Melanoma Program and chief of plastic surgery, Department of Surgery, at Richard L. Roudebush VA Medical Center, Indianapolis.

1989

Dr. Kevin Cwayna, Minneapolis, recently completed a book about homeless youth and AIDS, *Knowing Where the Fountains Are.* ■

4th Annual MMF Golf Classic

August 29, 1994

A tournament to benefit medical research and education at the University of Minnesota Medical Schools.

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IN MEMORIAM

JOHN D. BARKER, M.D., Class of 1939, died January 2 at the age of 80. Dr. Barker was a long-time general practice physician in Duluth. He is survived by his wife, Pearl, a daughter, and two sons.

SARAH J. GAULT, M.D., Class of 1950, St. Paul, died March 15 at age 71. She was born in Dallas in 1922, raised on a ranch in Woodson, Texas, and graduated from the University of Texas in 1942. She served in the U.S. Marine Corps in 1944-45 as a motion picture technician. She became a medical technologist and then pursued a career as a physician. Dr. Gault attended Baylor Medical School for two years, where she met her husband, Dr. N.L. (Neal) Gault, Jr., and in 1948 they transferred to the University of Minnesota Medical School.

Dr. Gault specialized in Physical Medicine & Rehabilitation (PMR), and served on the University faculty as assistant professor. From 1959-61, the family lived in Seoul, Korea, where they contributed time and service to medical ed ıcation programs at Seoul National University. In Okinawa in 1967-69 she developed the PMR program at Okinawa Central Hospital. Dr. Gault is survived by her husband, her daughter, two sons, and four grandchildren. Memorials are suggested to the Dr. Sarah J. Gault Memorial Scholarship Fund for Women Medical Students at the Minnesota Medical Foundation.

ROBERT D. HARPER, M.D., Class of 1934, of Billings, Montana, died March 4.

CHARLOTTE W. HILL, M.D., Class of 1959, of Wayzata, Minnesota, died March 18 at the age of 67. After receiving a nursing degree from New York University, she pursued a medical degree at the University of Minnesota. Dr. Hill taught ophthalmology at the University for 20 years and directed the Eye Pathology Laboratory. She was on attending staff at St. Paul-Ramsey Medical Center's Glaucoma Clinic from 1963 to 1973. In 1980, she began writing for the *American Journal of Ophthalmology*. The first executive director of the Minnesota Lions Eye Bank, Dr. Hill retired in 1987. Memorials are preferred to the Minnesota Lions Eye Bank.

DONALD E. HOGANSON, M.D., Class of 1944, died March 22 at the age of 76. Dr. Hoganson served as an Army physician in WWII and Korea. He was in private practice in Bemidji for 25 years before joining the VA Medical Center staff in Tomah, Wisconsin, in 1972. In 1984, Dr. Hoganson retired. He served as team physician for many high school and college teams and supervised medical coverage of the Minnesota Vikings training camps from 1961-65. He was a fellow emeritus in the American College of Sports Medicine. Dr. Hogan is survived by two sons.

SHERMAN N. KIEFFER, M.D., Class of 1950, died at the age of 74 on February 14. Dr. Kieffer served as assistant surgeon general with the National Institute of Mental Health from 1966 to 1971. From 1971 until his retirement in 1984, he was vice chair and professor in the Department of Psychiatry and Behavioral Science at the State University of New York Stony Brook, School of Medicine. Throughout his career as a psychiatrist, he held faculty appointments at Johns Hopkins, Tulane, Kentucky, Texas Christian, Washington, and Southwestern medical schools and was a U.S. delegate to the United Nations Commission on Narcotic Drugs and the Anglo-American Conference on Drug Taking in the Younger Generation. Dr. Kieffer was a fellow of the American College of Psychiatrists and the American Psychiatric Association. He is survived by his wife, Natalie, a daughter, and three sons.

RICHARD J. LIEN, M.D., Class of 1936, died March 23 at the age of 84. Dr. Lien had a fellowship at the Mayo Clinic and a residency at Johns Hopkins University Medical School. He practiced pediatrics for more than 50 years in St. Paul and Roseville, Minnesota. He is survived by his son.

ROBERT C. McGEE, M.D., Class of 1959, died March 17 at the age of 63. Dr. McGee served in the Air Force for two years before attending the University of Minnesota Medical School. He completed postgraduate orthopaedic training at the Veteran's Administration Hospital in Minneapolis and practiced orthopaedic surgery in Aberdeen, South Dakota, until retiring in 1990. He is survived by his wife, LaDonna, a daughter, and a son.

ALVIN J. MEYER, M.D., Class of 1929, died February 17 at age 89. He practiced in Minneapolis for over 40 years. Dr. Meyer is survived by his wife, Lorraine, and his son.

CARLETON A. NELSON, M.D., Class of 1941, died April 4 at the age of 79.

LLOYD S. NELSON, M.D., Class of 1940, died March 13 at the age of 80. Dr. Nelson, of Sun City, Arizona, specialized in pediatrics and was clinical assistant professor emeritus of pediatrics at the University of Minnesota. He also served as a major in the Army Medical Corps and was past president of the Minnesota Alumni Association. Dr. Nelson is survived by his wife, Olive, three daughters, and a son.

ROBERT TIPPETT POTTER, M.D., Class of 1939, died September 2. Dr. Potter specialized in dermatology.

RUGGLES M. STAHN, M.D., Class of 1973, of Rapid City, South Dakota, died March 1 at the age of 46. His medical specialty was preventive medicine.

JOHN W. WARREN, M.D., Class of 1964, died March 20 at the age of 65. Dr. Warren practiced obstetrics and gynecology at St. Mary's Hospital in Minneapolis (now Fairview Riverside Medical Center) and as a private practitioner. He was the first recipient of the Leonard A. Lang Award for excellence in obstetrics and gynecology. Dr. Warren was clinical professor at the University of Minnesota and was made emeritus professor in 1984. He is survived by his wife, Catherine, eight daughters, four sons, and ten grandchildren.

BILL HENRY WILLIAMS, M.D., Class of 1937, died January 3. Dr. Williams, of Chevy Chase, Maryland, specialized in pediatrics. ■

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Gary G. Hargroves

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THANKS FOR GIVING

Dr. Werner Simon

by Jean Murray

As a young man in Germany, Werner Simon wondered if he should devote his life to medicine or to music. As it turned out, he would do both. Dr. Simon became chief of psychiatry at the Minneapolis VA Medical Center, and he played his violin at Carnegie Hall.

The path to success was not an easy one, however. As a young Jewish medical student in Germany in the 1930s, Werner Simon was in the wrong place at the wrong time. He began medical school in Frankfurt, and played the trumpet in a dance band to help pay the tuition. When the band visited Switzerland to play, Simon applied to finish medical school there. He was eventually accepted, but in the interim returned to Germany where he was interrogated by the Gestapo and accused of being an informer.

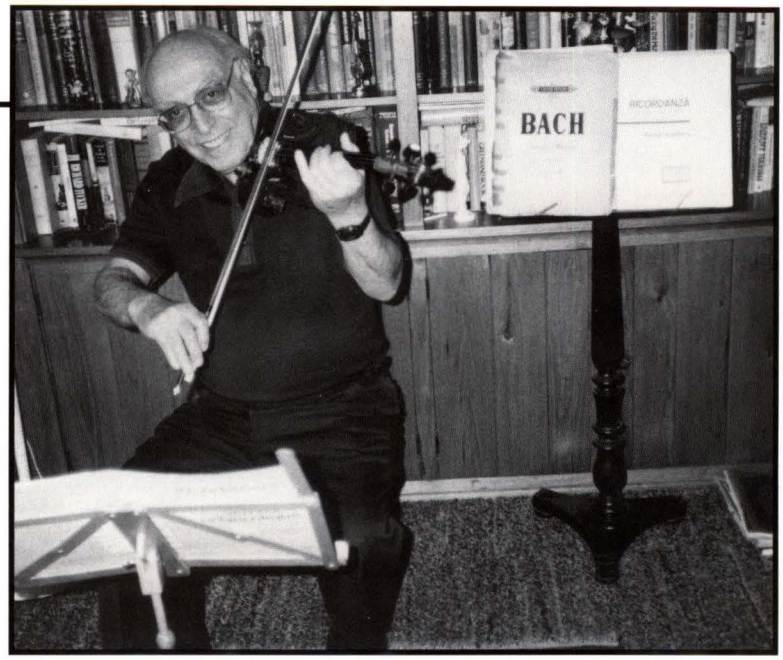
"I talked my way out of it," Dr. Simon says simply. An optimistic, kind, and soft-spoken man, he doesn't dwell on the difficult times.

After finishing medical school in Switzerland in 1937, Dr. Simon came to the United States. He was admitted to a residency program in Omaha, where he also kept his musical skills sharp by playing in a string quartet. The talented young cello player, Betty, soon became his wife.

In 1946, Dr. Simon accepted a position as staff psychiatrist at the St. Cloud, Minnesota, VA Hospital. Through an acquaintance with Dean Harold Diehl of the University of Minnesota Medical School, he transferred to the Minneapolis VA Medical Center in 1948. He spent 34 years at the VA Medical Center, 23 as chief of psychiatry.

Dr. Simon loves to teach, and has had a tremendous impact on the Twin Cities community through his teaching. There was a time during his career when more than half of all the psychiatrists practicing in the Twin Cities had been residents in his program. At the age of 80, he continues to conduct a weekly seminar in psychiatry at Hennepin County Medical Center, featuring specialists in many areas of the field.

His love of teaching and his desire to help students have motivated Dr. Simon to give generously to the Minnesota Medical Foundation. He has established two endowed scholarships: the Dr. Werner Simon and Elizabeth Strawn Simon Endowed Scholarship in Psychiatry, which provides financial assistance to medical students who show aptitude for psychiatry, and the Dr. Werner Simon and Elizabeth Strawn Simon Endowed Scholarship in Veterinary Medicine, to provide financial assistance to veterinary medical students who show a special interest in the psychological relationships between pets and their owners. He has also contributed to the Young Faculty Research Fund in Psychiatry and given valuable objects to the University of Minnesota Art Museum. Dr. Simon is a member of the Trustees Society of the University of Minnesota.



Dr. Werner Simon

Animals have been companions to the Simons for many years, and Dr. Simon is well aware of the positive impact they can have on people, especially the troubled and the elderly. He is part of a committee at Walker Nursing Home in Minneapolis studying the effects of live-in pets in the nursing home environment. Betty Simon now lives at Walker, suffering from Alzheimer's disease.

Music continues to be a very important part of Dr. Simon's life. He plays his violin in a string quartet of octogenarians "just for the fun of it." The current group doesn't make public appearances, but a few years ago an appearance at the Washington VA Central Office — in a benefit for homeless veterans — earned Dr. Simon an invitation to play at New York's Carnegie Hall for the same cause.

Sharing his gift of music at Carnegie Hall brought joy to Dr. Simon; sharing his talents as a teacher and a physician also brings him joy, as does supporting students through the scholarship programs he has established. He has touched many people through his warmth and caring, and his generosity is deeply appreciated. ■

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